

Southeast Region

In the Southeast United States (U.S.), there are three catch share programs: South Atlantic Wreckfish ITQ, Gulf of Mexico Red Snapper IFQ and Gulf of Mexico Grouper-Tilefish IFQ. The Wreckfish ITQ Program was designed by the South Atlantic Fishery Management Council and implemented by NOAA Fisheries Service in 1992. Due to the low number of participants, the Wreckfish ITQ Program is not covered in this report because landings data are confidential for most years in the past decade.

The Gulf of Mexico Red Snapper IFQ and the Gulf of Mexico Grouper-Tilefish IFQ Programs were created under the authority of the Reef Fish FMP and are jointly managed by NOAA Fisheries Southeast Regional Office and the Gulf of Mexico Fishery Management Council. The Reef Fish FMP was implemented in 1984 and the primary purpose was to rebuild declining reef fish stocks. The original FMP established gear and size restrictions, as well as data reporting requirements. The Reef Fish FMP manages 31 separate species, including 11 species of snappers (queen snapper, mutton snapper, blackfin snapper, red snapper, cubera snapper, gray snapper, lane snapper, silk snapper, yellowtail snapper, wenchman and vermilion snapper), 11 species of groupers (speckled hind, yellowedge grouper, goliath grouper, red grouper, warsaw grouper, snowy grouper, black grouper, yellowmouth grouper, gag grouper, scamp and yellowfin grouper), three species of tilefishes (goldface tilefish, blueline tilefish and tilefish), four species of jacks (greater amberjack, lesser amberjack, almaco jack and banded rudderfish), gray triggerfish and hogfish. As of September 10, 2012, there have been 32 approved plan amendments, two plan amendments that are awaiting approval/implementation, and two Secretarial Amendments to the Reef Fish FMP. The purposes of these amendments to the original Reef Fish FMP have included reducing harvest, reducing bycatch and addressing overcapacity in the commercial fishing sector. Plan amendments have also addressed overcapacity and harvest limits in the for-hire sector of the reef fish fishery. Amendment 26 established the Gulf of Mexico Red Snapper IFQ Program in 2007 and Amendment 29 implemented the Gulf of Mexico Grouper-Tilefish IFQ Program in 2010.

Table 4 displays a snapshot of the Economic Performance Indicators for the Southeast Catch Share Programs. More detailed results are presented below for these programs.

Table 4. Southeast Region Fishery Performance Measures by Catch Share Program

	Red Snapper IFQ (2010)	Grouper- Tilefish IFQ (2010)
Catch and Landings		
Quota allocated to program (gutted weight in pounds)	3,190,991	9,030,000
Aggregate landings (gutted weight in pounds)	3,056,117	4,443,376
% utilization	96%	49%
ACL exceeded	No	No
Effort		
Entities holding share (number)	425	766
Active vessels (number)	384	468
Days at sea (days)	12,906	21,936
Trips (number)	3,221	4,747
Season length (days)	365	365
Revenue		
Catch share program revenue (\$)	10,276,144	14,342,930
Non-catch share program revenue (\$)	10,806,276	12,924,625
Average price (\$/pound)	3.36	3.23
Catch share revenue per active vessel (\$/vessel)	26,761	30,647
Non-catch share revenue per vessel (\$/vessel)	28,141	27,617
Catch share revenue per day at sea (\$/day)	796	654
Non-catch share revenue per day at sea (\$/day)	837	589
Catch share revenue per trip (\$/trip)	3,190	3,021
Non-catch share revenue per trip (\$/trip)	3,355	2,723
Other		
Excessive share cap	Yes	Yes
Cost recovery fee collected (\$)	308,285	430,294

Gulf of Mexico Red Snapper IFQ Program

a. Management History

Prior to the 2007 implementation of the Gulf of Mexico Red Snapper IFQ Program, commercial fishermen raced to harvest the quota before it was met and the season was closed. Limited access fishing permits, trip limits, closed seasons and a quota were the primary management tools used to constrain commercial harvest. Overfishing, overcapacity and short fishing seasons led to unsafe fishing seasons, created market gluts and reduced ex-vessel prices. High bycatch and discard rates often occurred. The red snapper stock has been overfished since the late 1980s and was subject to overfishing until 2010.

In 2010, the Deepwater Horizon accident and resulting oil spill resulted in large closures of the Gulf of Mexico, including state and federal waters. Large areas off of Louisiana, Alabama, Mississippi and Florida were closed to fishing during May through November, 2010. The commercial red snapper sector was less affected by the area closures because fishermen were able to transfer quota allocation during the closure period to fishermen fishing in other areas of the Gulf of Mexico and use their quota allocation once areas were reopened. Furthermore, the red snapper commercial quota increased in 2010.

b. Objectives

The primary objectives of the IFQ Program are to reduce overcapacity and to the extent possible mitigate derby fishing conditions. Ending the race to fish was anticipated to help end overfishing and rebuild Gulf of Mexico red snapper, eliminate seasonal closures, increase market stability, increase flexibility and efficiency of fishing operations, and improve safety at sea, management, enforcement and compliance.

c. Key Events/Features

The Gulf of Mexico Fishery Management Council designed the Gulf of Mexico Red Snapper IFQ Program to allow eligibility based on those owners who held a valid red snapper license and reported landings on a Class 1 or Class 2 license. Initial shares were based on the amount of red snapper landings reported in federal logbooks from 1990 – 2004 (Class 1 License Holders) and 1998 – 2004 (Class 1 Historical Captain License Holders and Class 2 License Holders).

Eligible participants received quota shares expressed as a percentage of the overall commercial quota. The shares allowed those eligible participants to an annual allocation which determines the amount of fish they can harvest in that year. Quota shares and allocation can be transferred at any time to any participant who has an IFQ account with NOAA Fisheries. Quota share sales are permanent and are conducted via the IFQ website. Quota shares and allocation transfers are conducted independently. Quota share transfers require the approvals of both the transferor and transferee while allocation transfers require approval of just the transferor.

When red snapper are landed, dealers must report the gutted weight and price of landed fish for each IFQ Program vessel account. This transaction is not complete until confirmed by the quota shareholder. In addition, vessel owners are required to submit catch reports for individual trips via logbooks. The Southeast Regional Office also produces an annual IFQ Program report (available at <http://sero.noaa.gov/sf/GulfReefFishIFQ.htm>). The five-year review of the Gulf of Mexico Red Snapper IFQ Program's performance is currently being conducted, with completion expected in 2013.

Section 304(d)(2) of the Magnuson-Stevens Act authorizes the Secretary to adopt regulations implementing a cost recovery program to recover the actual costs related to management, data collection and enforcement of a Limited Access Privilege Program or Community Development

Quota Program. The cost recovery fee can be a maximum of 3% of the ex-vessel value of the program species. Fees collected for cost recovery in the Gulf of Mexico Red Snapper IFQ Program have ranged from \$250,000 – \$315,000 (3% of the corresponding year’s revenue) over the duration of the IFQ Program (Figure 61). IFQ Program dealers are responsible for collecting the cost recovery fee from IFQ Program shareholders at the time of each sales transaction. IFQ Program dealers are then responsible for submitting the cost recovery fees to NOAA Fisheries on a quarterly basis through the IFQ Program.

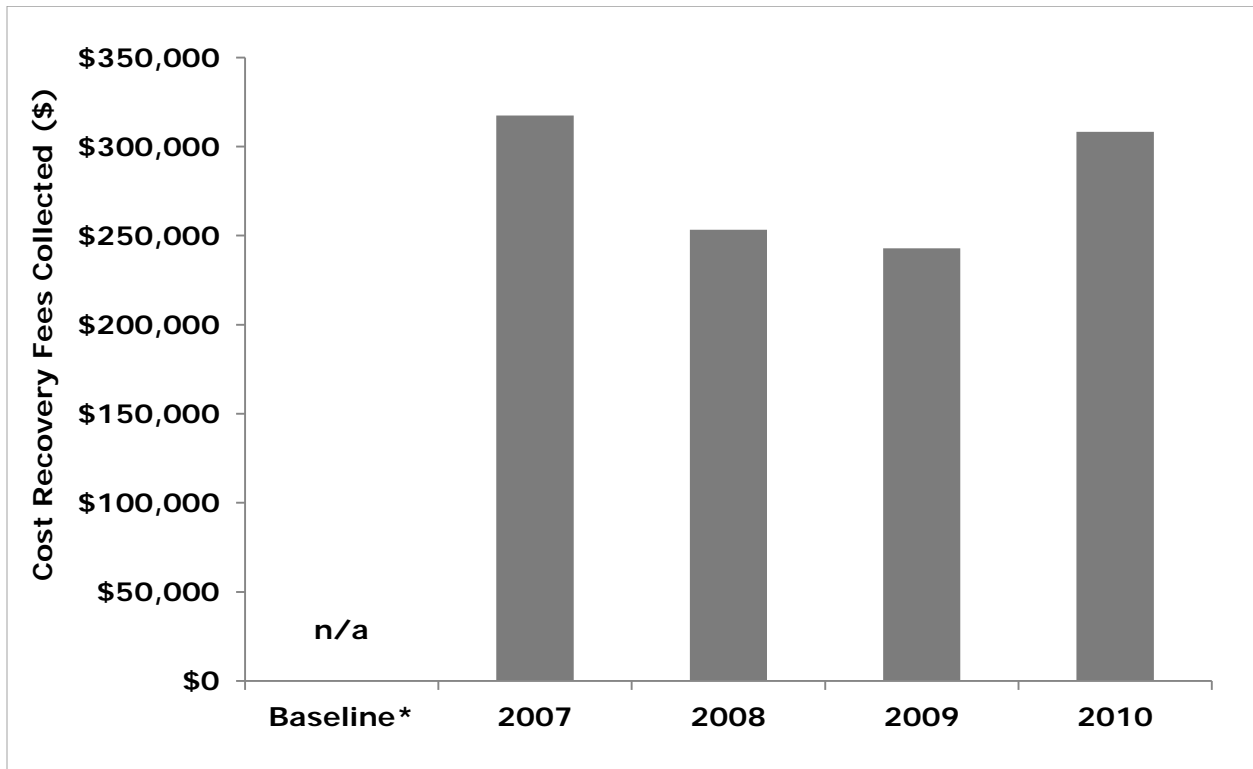


Figure 61. Cost recovery fees (inflation-adjusted 2010 dollars) collected in the Gulf of Mexico Red Snapper IFQ Program

The purpose of excessive quota share caps is to prevent individual shareholders from controlling production as well as achieving management objectives, per the Magnuson-Stevens Act and the National Standards. The Magnuson-Stevens Act requires fishery managers to ensure that IFQ Program shareholders do not acquire an excessive share of the quota. A 6.0203% excessive share cap is in place on quota share only; there is no cap for quota pounds. The Southeast Regional Office tracks quota shares and quota pounds in real-time through the online IFQ system. Share transfers that would exceed the share caps are prohibited.

d. Recent Trends

The Baseline Period refers to the average of the three years prior to implementation of the Gulf of Mexico Red Snapper IFQ Program (2004 – 2006).

- i. Catch and Landings – All pounds are in gutted weight.

Coincident with the introduction of the IFQ Program in 2007, the red snapper rebuilding plan was revised, reducing the commercial quota by a third (from 4.2 million gutted weight pounds in the

Baseline Period to 3.0 million gutted weight pounds in 2007; Figure 62). In 2008, the commercial quota was further reduced to 2.3 million gutted weight pounds and remained constant at this level through 2009. In 2010, the quota was raised to 3.2 million gutted weight pounds. Red snapper landings followed a similar trend: landings fell by 29% to 2.9 million gutted weight pounds in 2007, compared to the Baseline Period of 4 million gutted weight pounds Figure 62. Landings were constant in 2008 and 2009 (2.2 million gutted weight pounds), but increased by 37% to 3.1 million gutted weight pounds in 2010. Utilization of the quota has basically remained constant from the Baseline Period through 2010 at 96-97% (Figure 63). During the Baseline Period (2004 – 2006), the red snapper Annual Catch Limit (ACL) was exceeded once in 2006. The ACL has not been exceeded since implementation of the IFQ Program.

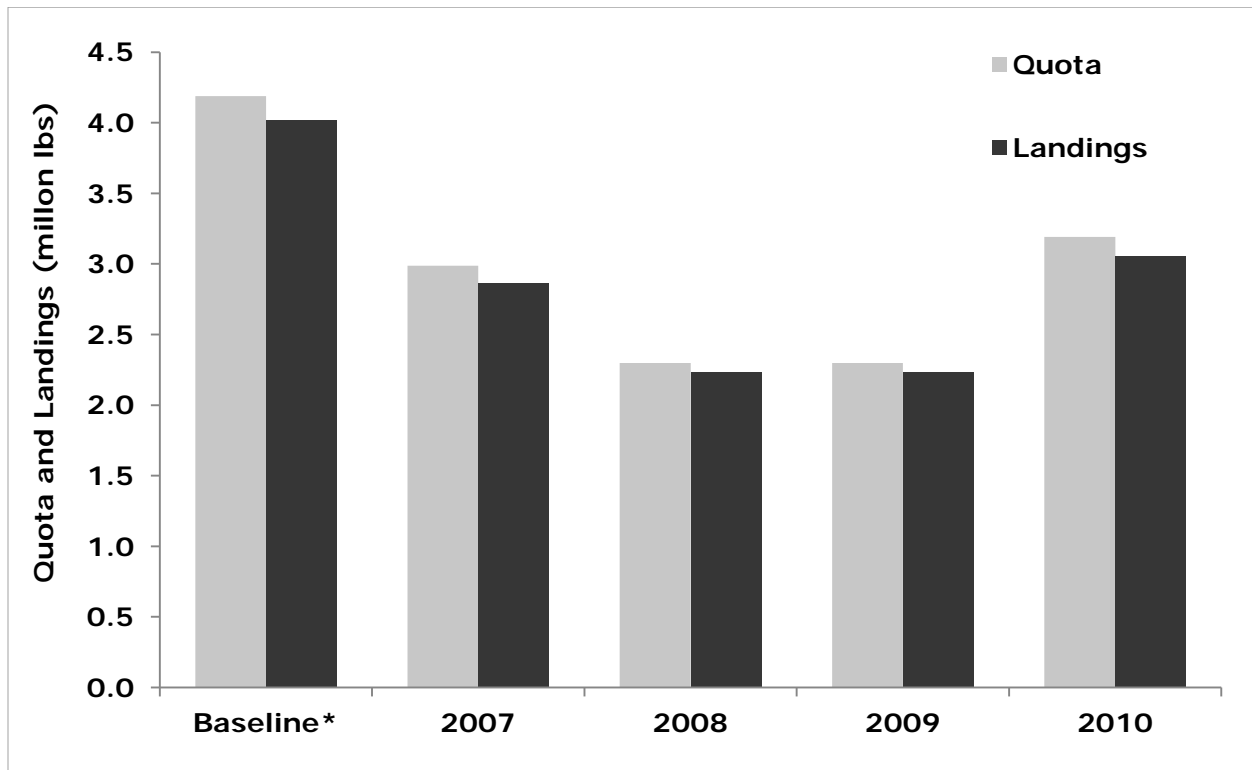


Figure 62. Quota and landings in the Gulf of Mexico Red Snapper IFQ Program

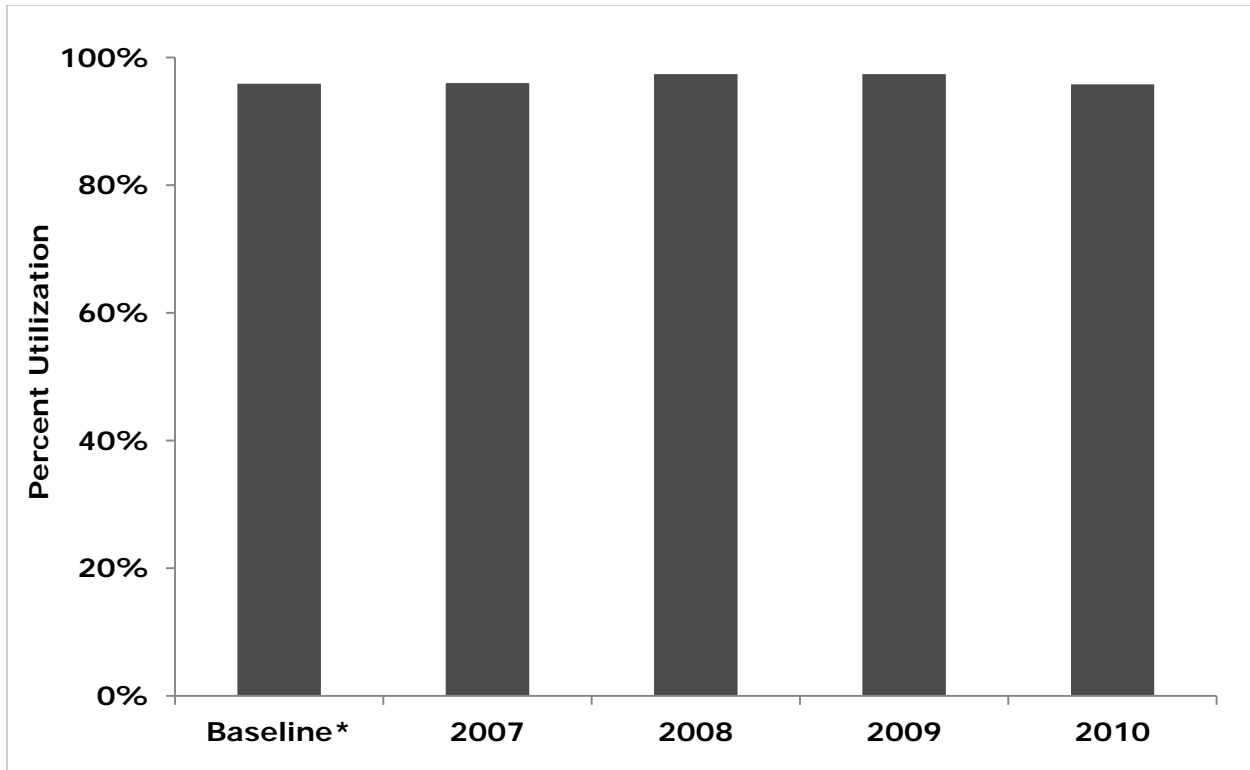


Figure 63. Utilization of available quota in the Gulf of Mexico Red Snapper IFQ Program

ii. Effort

The initial number of entities holding IFQ Program quota share decreased by 21% from 2007 to 2010 (Figure 64). The states of Florida (48%) and Texas (32%) have the most red snapper shareholders. In the first year of the Gulf of Mexico Red Snapper IFQ Program, the number of active vessels decreased by a third (36%) compared to the Baseline Period (Figure 65). In 2010, the number of active vessels was only 20% less than the number of vessels in the Baseline Period, increasing 31% from 2009 levels (Figure 65). Initially, red snapper fishermen spent 17% fewer days fishing in 2007 compared to the Baseline Period and 4% fewer days fishing in 2010 compared to the Baseline Period (Figure 66), increasing 37% from 2009 levels. However, in 2010 fishermen spent 16% more days fishing compared to 2007. The greater number of active vessels and days spent fishing was in part due to higher quotas in 2010, as well as implementation of the Gulf of Mexico Grouper-Tilefish IFQ Program, which resulted in more vessels participating in the IFQ Program. In the first year of the Gulf of Mexico Red Snapper IFQ Program, the number of trips decreased by one-half compared to the Baseline Period (Figure 67). Since 2007, the number of trips increased by 21% to 3,221 trips.

The introduction of the Gulf of Mexico Red Snapper IFQ Program and removal of harvesting windows resulted in a longer fishing season. The season length increased by 202% from 121 days in the Baseline Period to the entire year during the IFQ program (Figure 68). However, despite having a year round season, actual days fished by IFQ fishermen are constrained by the amount of IFQ quota they possess.

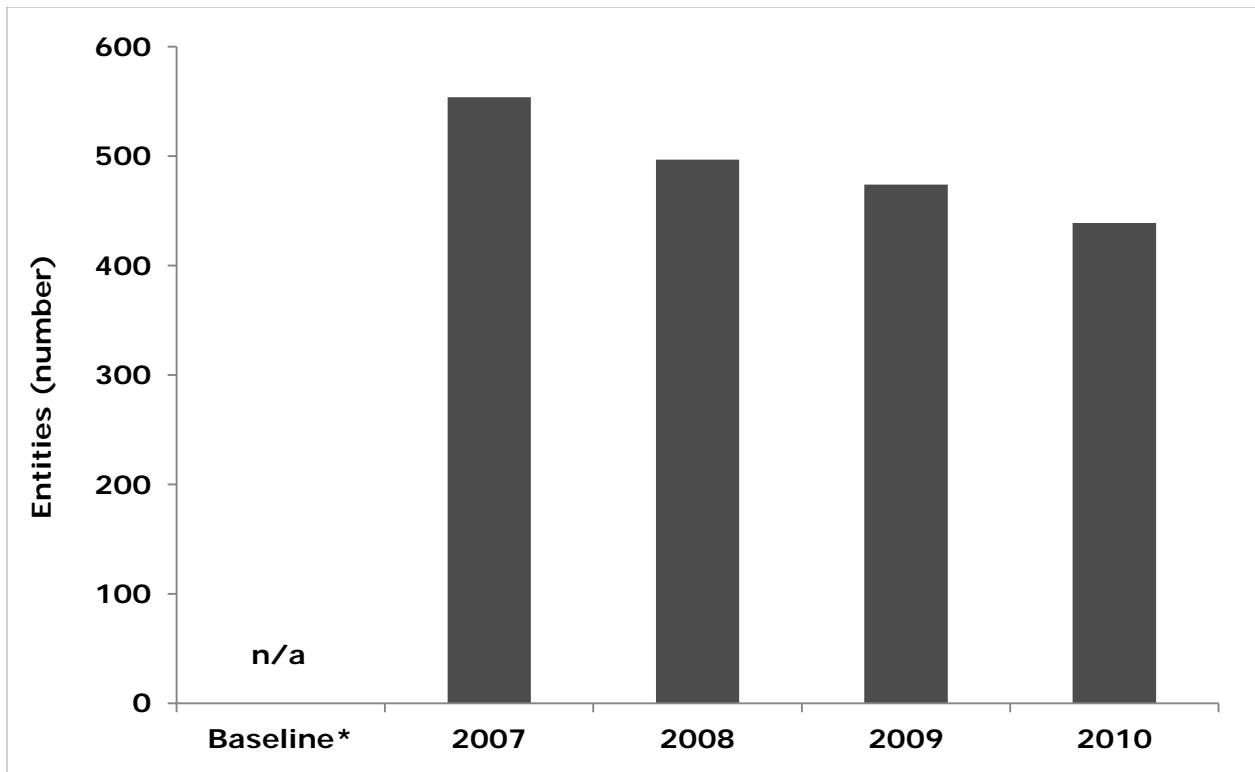


Figure 64. Number of entities holding share in the Gulf of Mexico Red Snapper IFQ Program

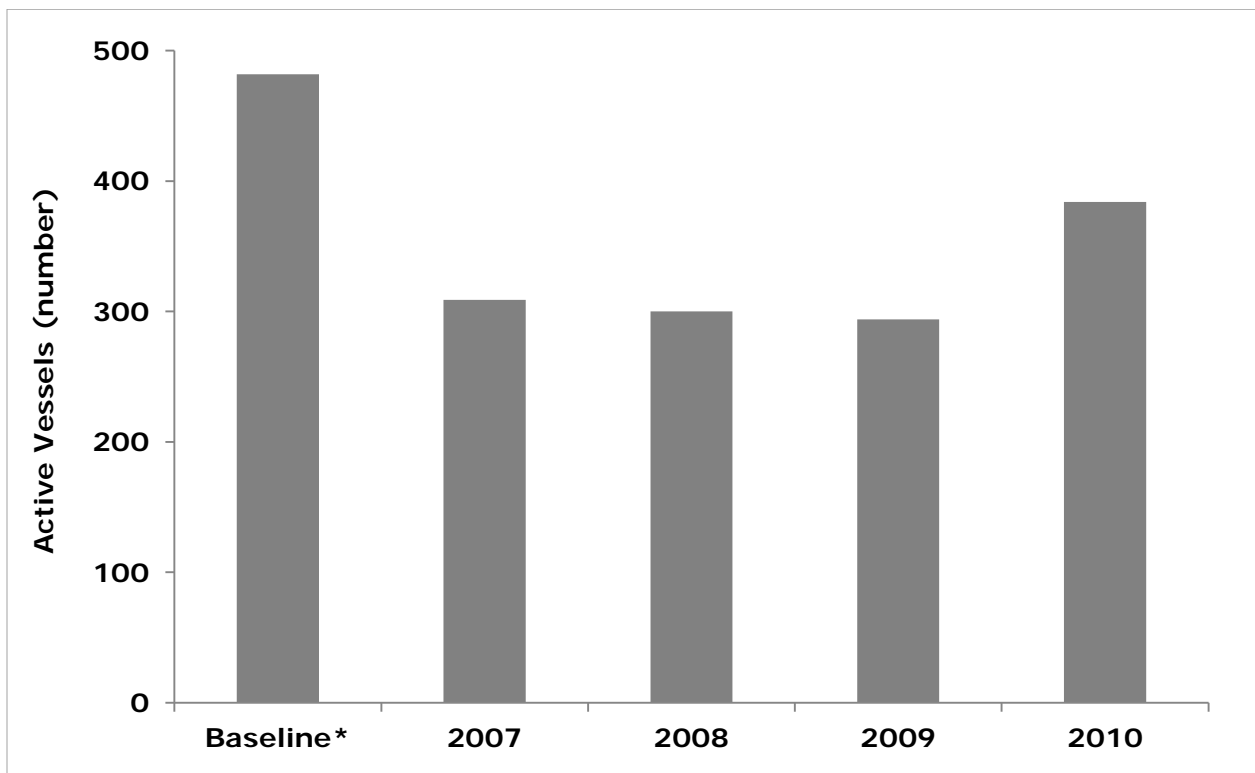


Figure 65. Active vessels fishing quota in the Gulf of Mexico Red Snapper IFQ Program

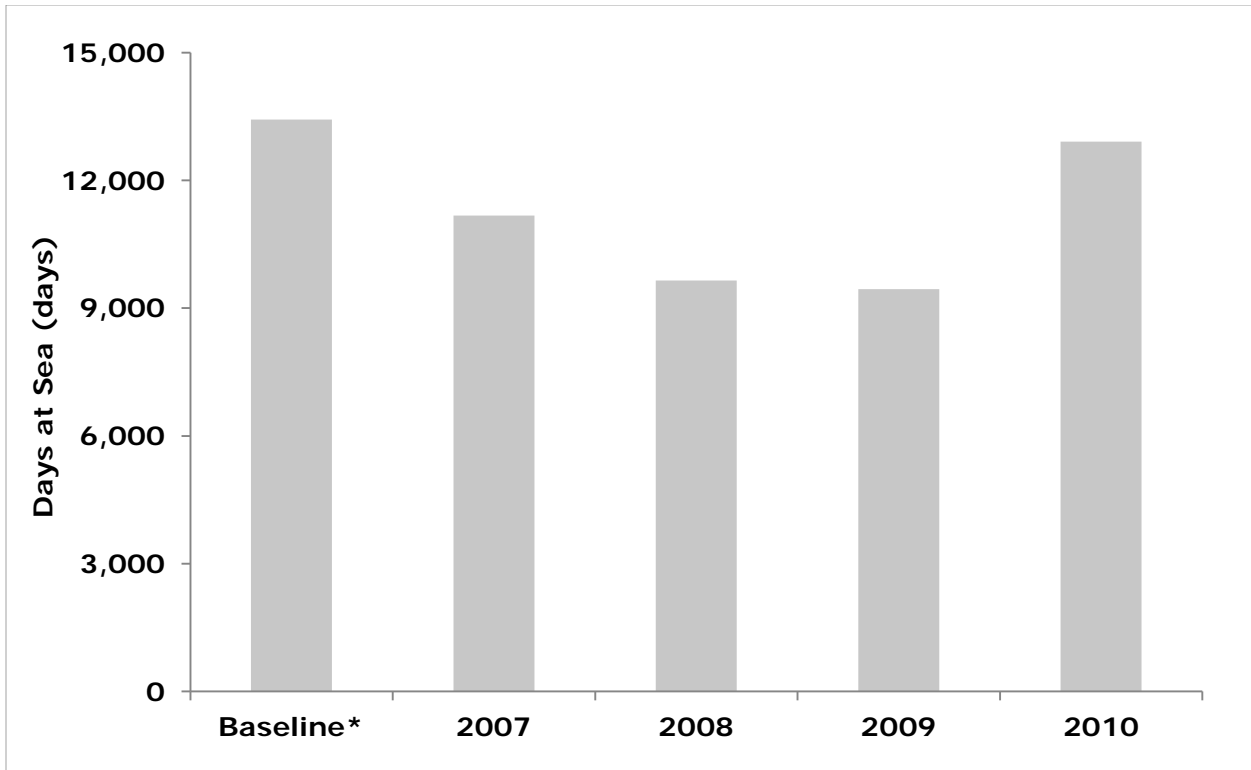


Figure 66. Number of days at sea on trips fishing quota in the Gulf of Mexico Red Snapper IFQ Program

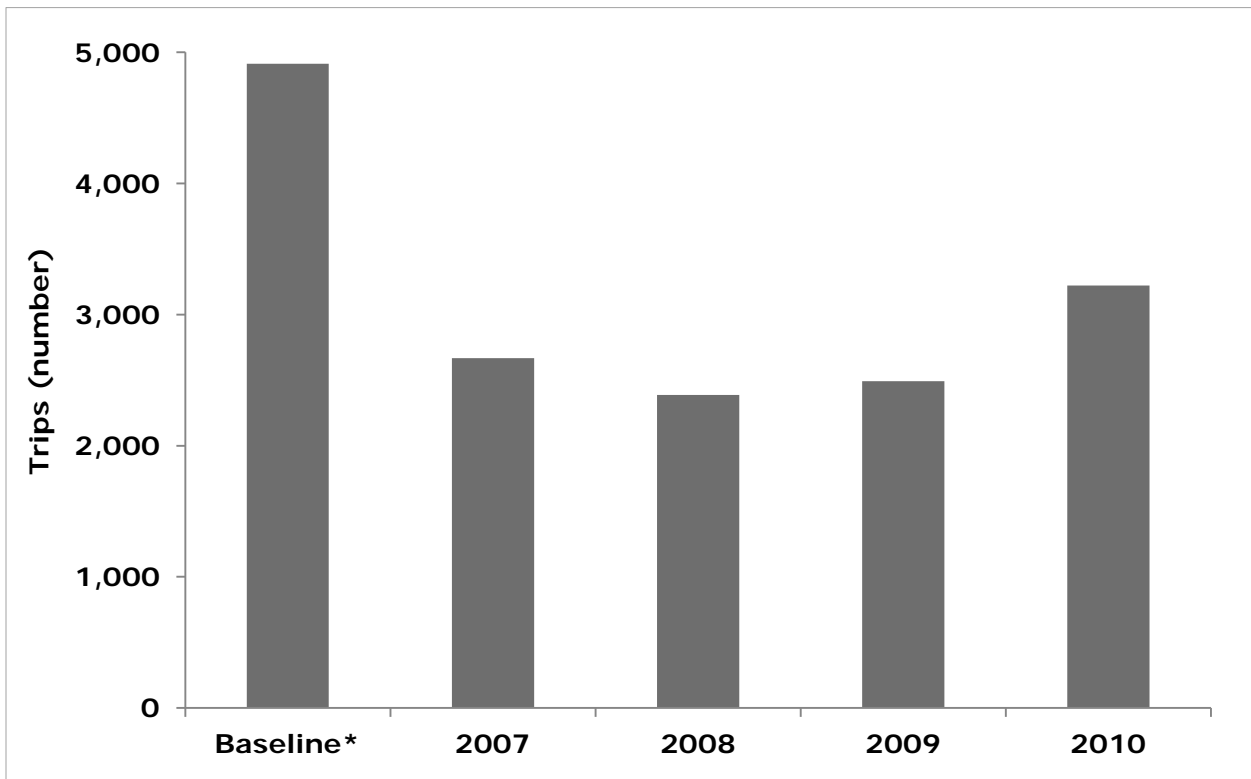


Figure 67. Number of trips harvesting red snapper in the Gulf of Mexico Red Snapper IFQ Program

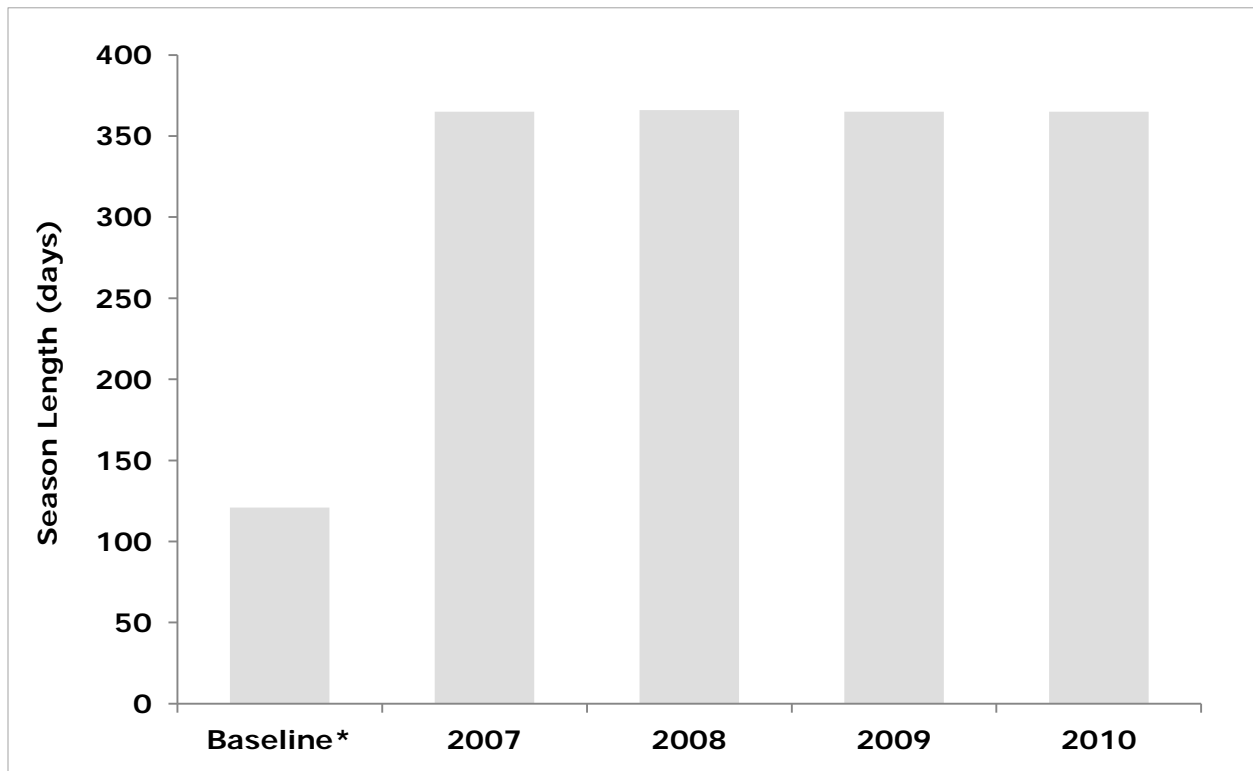


Figure 68. Season length (days) in the Gulf of Mexico Red Snapper IFQ Program

- iii. Revenue – All revenue and cost recovery data have been adjusted by the GDP Deflator Indexed for 2010.

In the first year of the Gulf of Mexico Red Snapper IFQ Program, the commercial quota was reduced by 29%. Accordingly, revenue from red snapper landings fell by 21% in 2007 compared to the Baseline Period (Figure 69). In 2010, the red snapper quota was raised and ex-vessel revenue also increased by a third to \$10.3 million. During the Baseline Period, revenue from species other than red snapper was \$7.6 million, approximately 36% of the revenue on red snapper trips. In 2007 – 2010, non-red snapper revenue was \$9 – 11 million and constituted 46 – 55% of the revenue on red snapper trips.

The average price for red snapper was \$3.32 per pound in the Baseline Period. Since the inception of the IFQ Program, average prices for red snapper have fluctuated from \$3.36 – \$3.77 per pound (Figure 70). Estimates of the average ex-vessel red snapper price per pound can be difficult to interpret due to reporting issues. Since implementation of the IFQ Program, there have been an increased number of transactions reporting ex-vessel prices less than what would be expected. This increase in lower prices is partly due to some dealers subtracting costs associated with allocation transfers and goods and services prior to reporting ex-vessel prices. In 2011, a new rule clarified that dealers must report ex-vessel prices as the price paid prior to deductions for allocation transfers. Importantly, these lower prices may have led to underestimation of red snapper revenue¹⁰, thus the revenue-based indicators for this program should be viewed with caution. Methods to correct the price and revenue estimates are under development.

¹⁰ Low reported prices may be affecting ex-vessel price and revenue estimates for grouper-tilefish landings as well.

Despite the 29% cut in quota, revenue per vessel increased in 2007 relative to the Baseline Period (Figure 71). Red snapper revenue per vessel decreased in 2008, 2009, and 2010; however, revenue per vessel in 2010 is only 3% less than the Baseline Period despite the quota being 1 million pounds less than during the Baseline Period and the issue with reported prices. Total revenue (including landings from red snapper and non-red snapper landings) per vessel increased by 46% to \$63,680 in 2007 compared to the Baseline Period. Total revenue per vessel decreased in subsequent years (2008, 2009, 2010), but 2010 total revenue per vessel (\$54,902) was still 26% greater than the Baseline Period.

Red snapper revenue per day decreased by 5% in the first year of the IFQ Program compared to the Baseline Period. Since 2007, the decreasing revenue per day trend has continued through 2010 where revenue per day is 20% less than the Baseline Period (Figure 72). Total revenue (including landings from red snapper and non-red snapper landings) per day at sea increased in 2007 and 2008 and was 24% higher in 2008 relative to the Baseline Period. Total revenue per day decreased in both 2009 and 2010; however, total revenue per day in 2010 (\$1,634) is 4% greater than the Baseline Period (\$1,564).

Red snapper revenue per trip follows a similar trend: initial increase (46%) in the first year of the IFQ Program, followed by decreases in revenue per trip in subsequent years (Figure 73). Total revenue (including landings from red snapper and non-red snapper landings) per trip was \$7,378 in 2007, a 73% increase from the Baseline Period. In 2010, total revenue per trip was \$6,545. While the 2010 total revenue per trip is lower than previous years under the IFQ Program, it is still 53% greater than the Baseline Period. While red snapper revenue per trip decreased in subsequent years of the IFQ Program, total revenue and total revenue per trip or day increased because fishermen are catching more vermilion snapper to offset red snapper quota decreases.

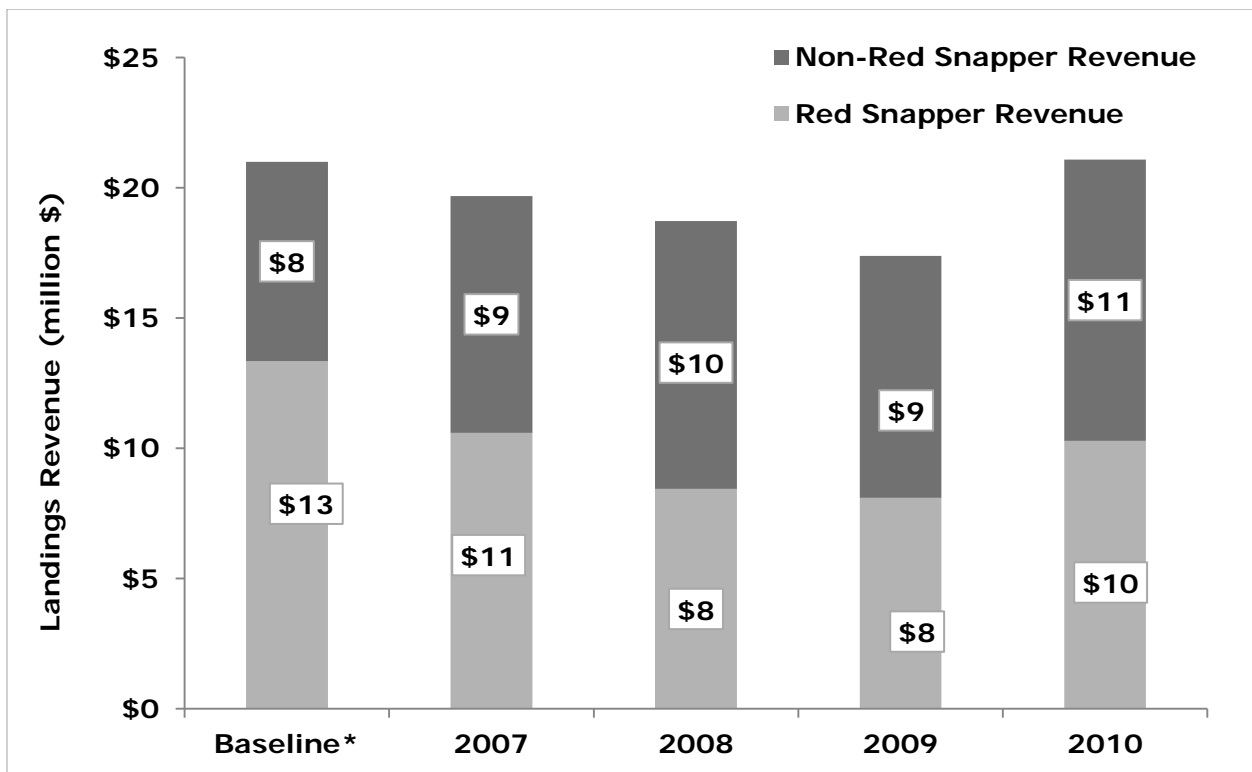


Figure 69. Total red snapper and non-red snapper revenue (inflation-adjusted 2010 dollars) by vessels fishing quota in the Gulf of Mexico Red Snapper IFQ Program

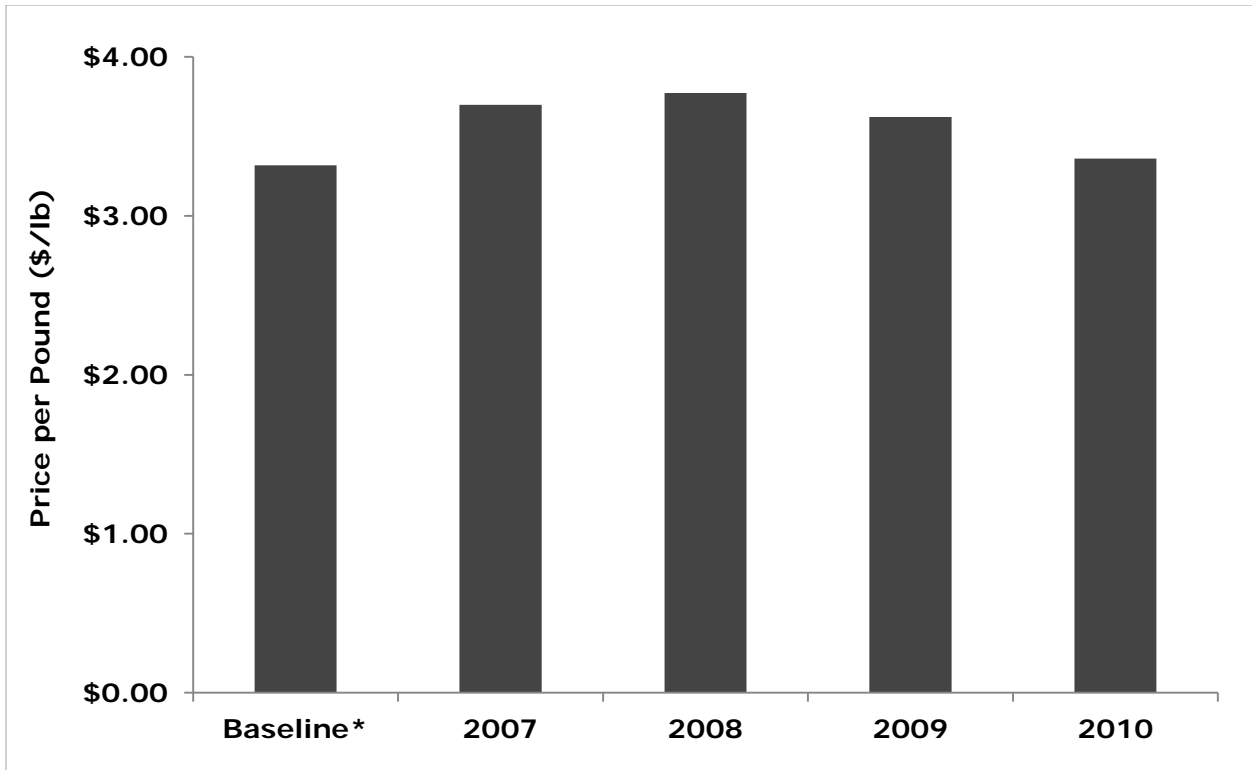


Figure 70. Average red snapper price per pound (inflation-adjusted 2010 dollars) in the Gulf of Mexico Red Snapper IFQ Program

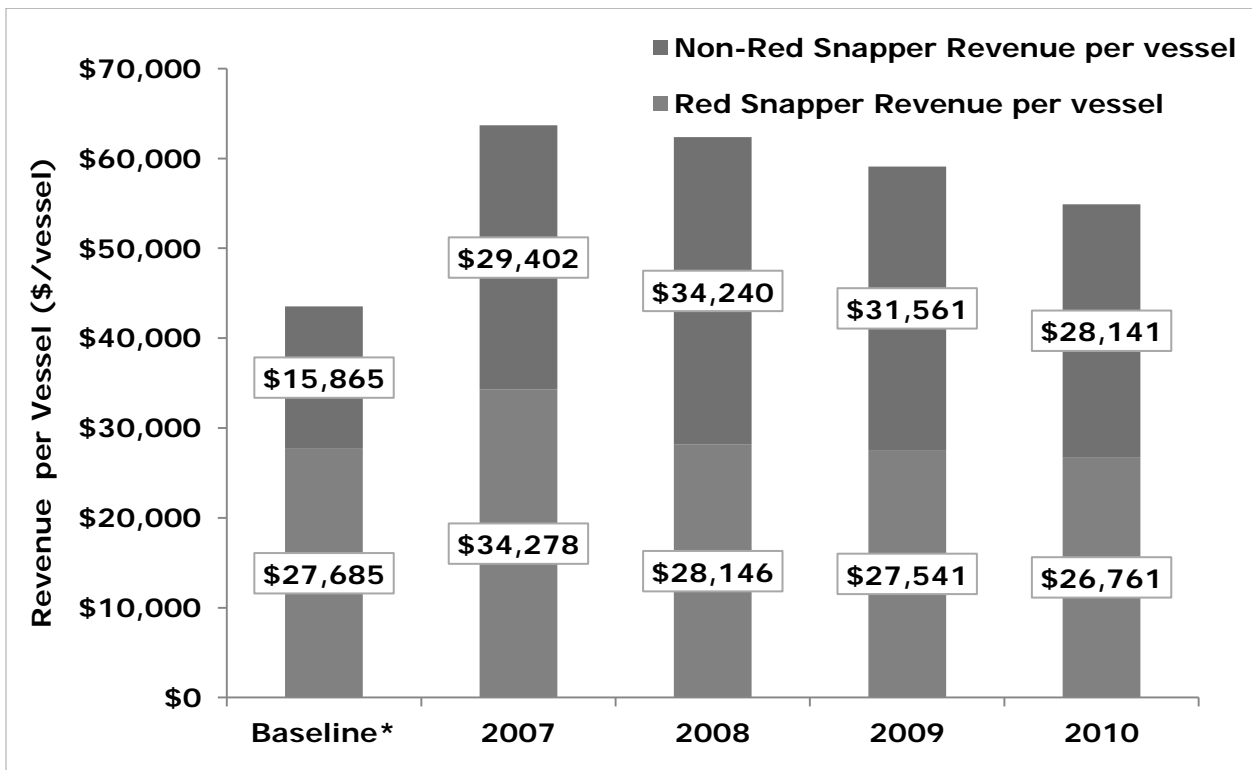


Figure 71. Red snapper and non-red snapper revenue (inflation-adjusted 2010 dollars) per vessel fishing quota in the Gulf of Mexico Red Snapper IFQ Program

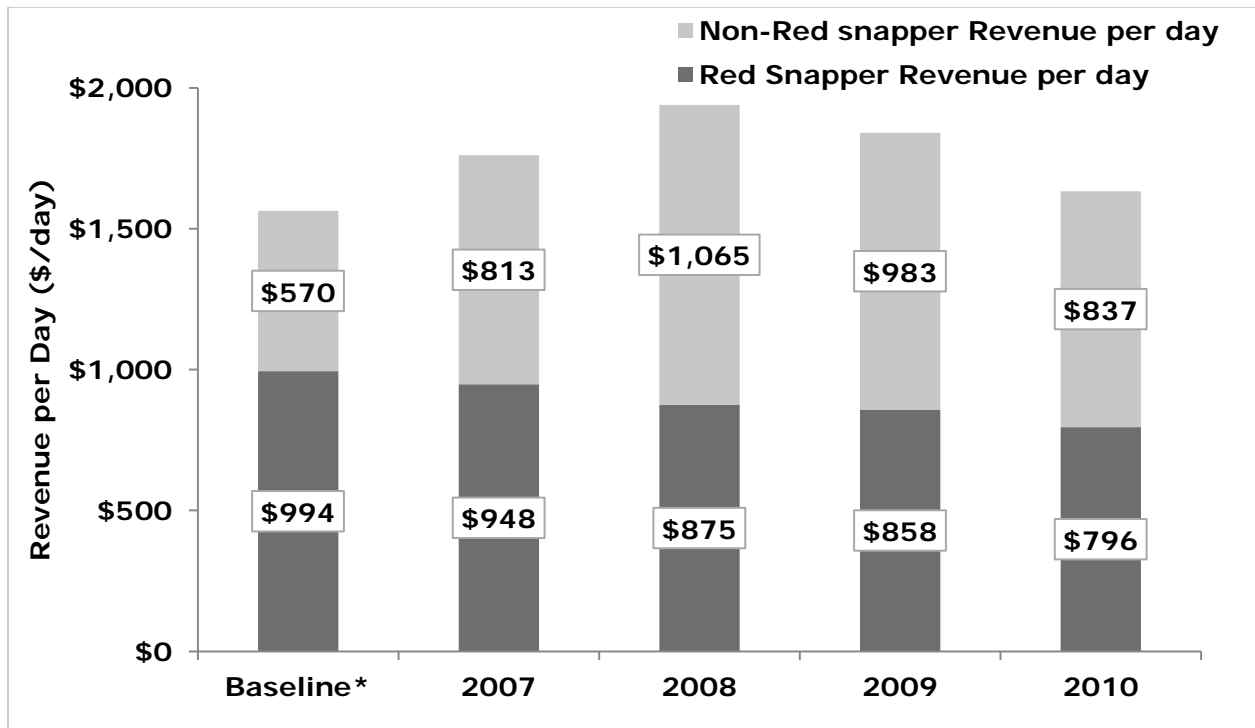


Figure 72. Red snapper and non-red snapper revenue (inflation-adjusted 2010 dollars) per day at sea that vessels fish quota in the Gulf of Mexico Red Snapper IFQ Program

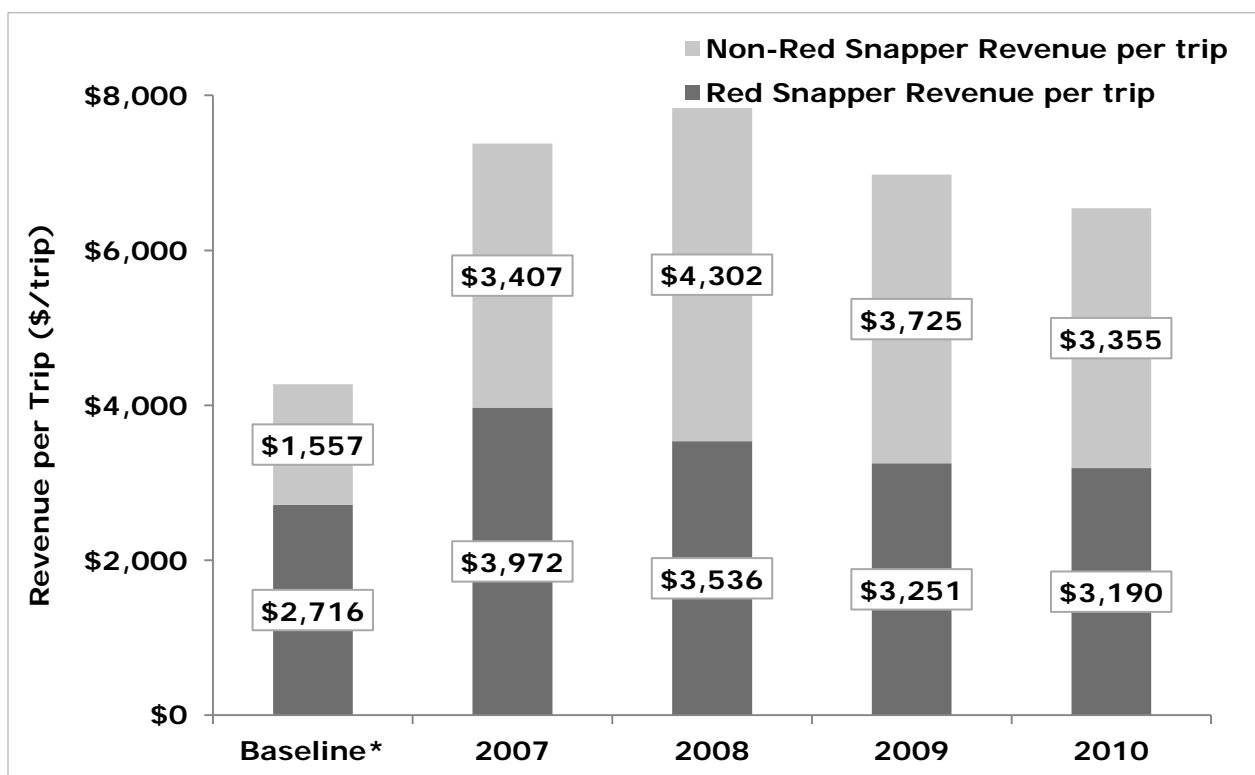


Figure 73. Red snapper and non-red snapper revenue (inflation-adjusted 2010 dollars) per trip that vessels fish quota in the Gulf of Mexico Red Snapper IFQ Program

Gulf of Mexico Grouper-Tilefish IFQ Program

a. Management History

Regulations prior to the implementation of the IFQ Program resulted in a race to fish that led to early closures and quota overages of some species. Quotas for deepwater groupers and tilefishes were met in four to six months and the shallow-water grouper quota was met six to 10 weeks prior to the end of the 2004 and 2005 fishing years. Limited access fishing permits, trip limits, closed seasons and quotas were the primary management tools. The gag stock was overfished and also experiencing overfishing.

In 2010, the Deepwater Horizon accident and resulting oil spill resulted in large closures of the Gulf of Mexico, including state and federal waters. Large areas off of Louisiana, Alabama, Mississippi and Florida were closed to fishing during May through November 2010. Landings of groupers and tilefishes were reduced off the coasts of these Gulf States.

b. Program Objectives

The Gulf of Mexico Grouper-Tilefish IFQ Program has five management units: red grouper, gag grouper, other shallow water groupers (including black grouper, yellowfin grouper, scamp and yellowmouth grouper), deepwater groupers (including yellowedge grouper, warsaw grouper, snowy grouper, speckled hind and misty grouper) and tilefishes (including goldface tilefish, blueline tilefish and other tilefish). In 2012, the following species were removed from the Gulf of Mexico Grouper-Tilefish IFQ Program: rock hind, red hind, misty grouper, anchor tilefish and blackline tilefish.

The Grouper-Tilefish IFQ Program was implemented to reduce overcapacity and mitigate the race to fish the grouper-tilefish segment of the commercial reef fish fishery. Ending the race to fish was anticipated to help end overfishing and rebuild Gulf of Mexico grouper and tilefish stocks, eliminate seasonal closures, increase market stability, increase flexibility and efficiency of fishing operations, and improve safety at sea, management, enforcement and compliance.

c. Key Events/Features

The Gulf of Mexico Fishery Management Council determined eligibility for the grouper-tilefish program to be those owners who held a valid Gulf of Mexico reef fish permit on October 1, 2009. Initial IFQ quota share percentages were based on the average landings by management unit reported in federal logbooks from 1999 – 2004, with the allowance to drop one year of landings data.

Eligible participants received quota shares expressed as a percentage of the overall commercial quota. The shares provided those eligible participants an annual allocation which determines the amount of fish they can harvest in that year. Quota shares and allocation can be transferred annually to other eligible permit holders. Quota share sales are permanent and are conducted via the IFQ website. Quota shares and allocation transfers are conducted independently. Quota share transfers require the approvals of both the transferor and transferee, while allocation transfers require approval of just the transferor.

When groupers and tilefishes are landed, dealers must report the weight and price of landed fish for each IFQ vessel. This transaction is not complete until confirmed by the quota shareholder. In addition, vessel owners are required to submit catch reports for individual trips via logbooks. The Southeast Regional Office also produces an annual IFQ report (available at <https://ifq.sero.nmfs.noaa.gov/>). The five-year review of the Gulf of Mexico Grouper-Tilefish IFQ Program's performance is planned for 2015.

Section 304(d)(2) of the Magnuson-Stevens Act authorizes the Secretary to adopt regulations implementing a cost recovery program to recover the actual costs related to management, data collection and enforcement of a Limited Access Privilege Program or Community Development Quota Program. The cost recovery fee can be a maximum of 3% of the ex-vessel value of the program species. Fees collected for cost recovery in the Gulf of Mexico Grouper-Tilefish IFQ Program were \$430,294 (3% of revenue) in 2010 (Figure 74). IFQ dealers are responsible for collecting the cost recovery fee from IFQ shareholders at the time of each sales transaction. IFQ Program dealers are then responsible for submitting the cost recovery fees to NOAA Fisheries on a quarterly basis through the IFQ Program electronic reporting system.

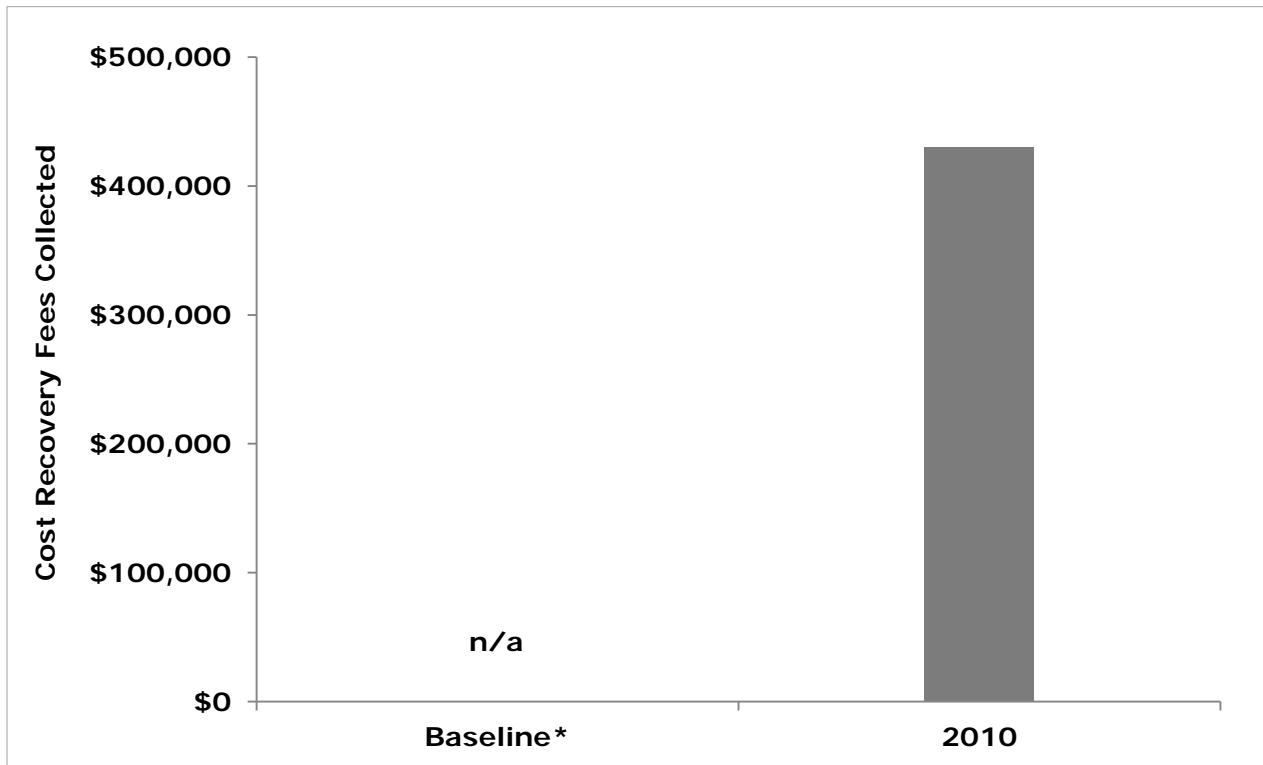


Figure 74. Cost recovery fees (inflation-adjusted 2010 dollars) collected in the Gulf of Mexico Grouper-Tilefish IFQ Program

The purpose of excessive quota share caps is to prevent individual shareholders from controlling production as well as achieving management objectives, per the Magnuson-Stevens Act and the National Standards. The Magnuson-Stevens Act requires fishery managers to ensure that IFQ Program shareholders do not acquire an excessive share of the quota. The quota share caps established are 4.33% for red grouper; 2.35% for gag grouper; 7.27% for shallow water groupers; 14.7% for deepwater groupers and 12.2% for tilefishes. An allocation share cap is set equal to the sum of the maximum allocations associated with the five grouper-tilefish share caps. The allocation cap is calculated based on the current fishing year's quotas. The Southeast Regional Office tracks quota shares and allocation in real-time through the online IFQ system. Share or allocation transfers that would exceed the share caps are prohibited.

Recent Trends

The Baseline Period refers to the average of the three years prior to the implementation of the IFQ Program (2007 – 2009).

- i. Catch and Landings – Pounds are in gutted weight.

With the introduction of the IFQ Program in 2010, commercial quota closures were eliminated, as fishermen were allocated percentages of the grouper-tilefish quotas based on historical participation. The quota allocated to IFQ Program shareholders in 2010 was 800,000 pounds less (8% reduction) than the quota in the Baseline Period (Figure 75). The commercial sector landed 70% of the quota assigned to species within Gulf of Mexico Grouper-Tilefish IFQ Program management units during the Baseline Period; whereas, less than 50% of the commercial sector quota was landed in 2010 (Figure 76). Trips landing grouper-tilefish may also land red snapper if the vessel owner has red snapper quota allocation. Accordingly, trips attributed to the Gulf of Mexico Grouper-Tilefish IFQ Program may also be attributed to the Gulf of Mexico Red Snapper IFQ Program. The quotas were exceeded for deepwater groupers and tilefishes during the Baseline Period; however, the quotas were not exceeded for any of the five management units in 2010.

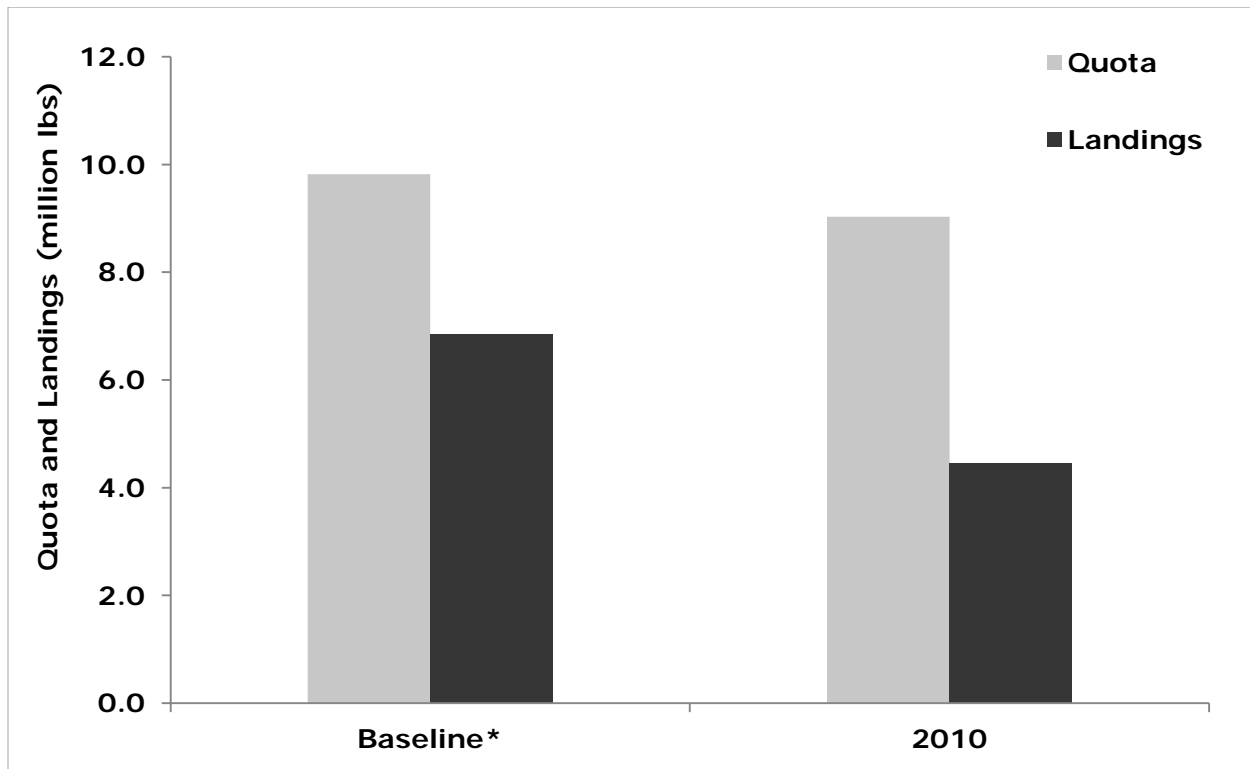


Figure 75. Quota and landings in the Gulf of Mexico Grouper-Tilefish IFQ Program

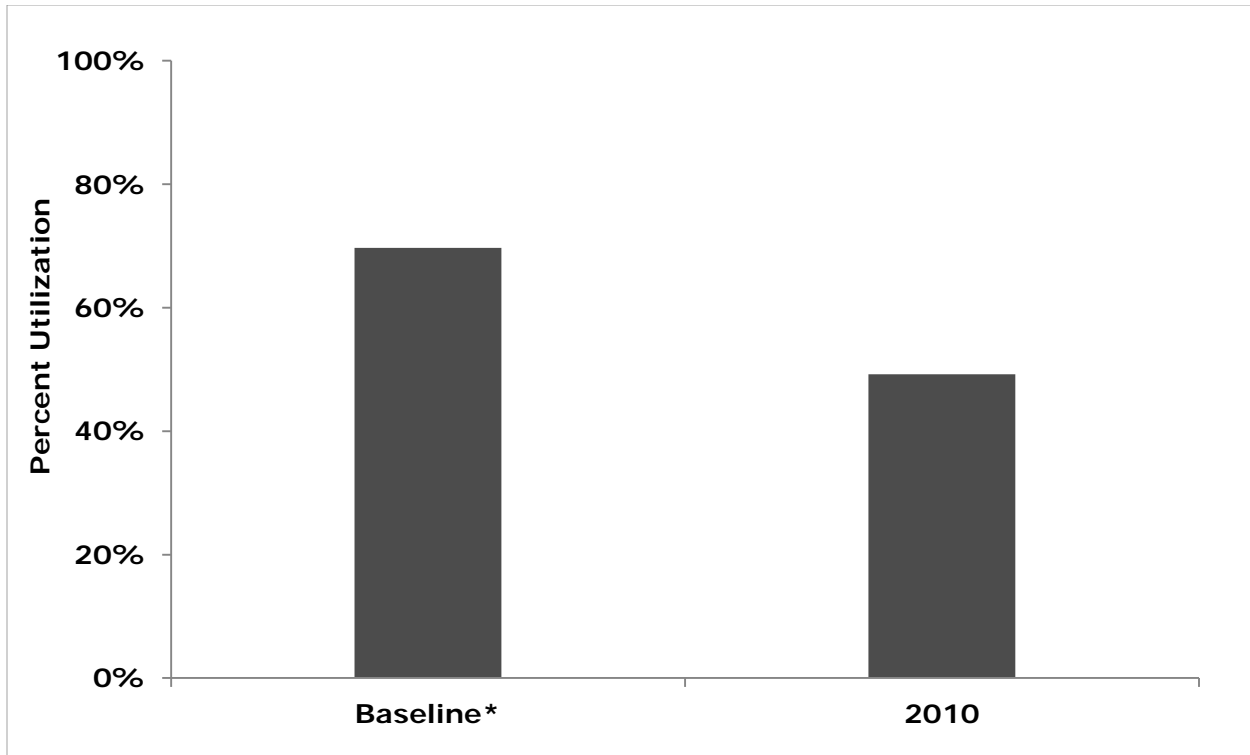


Figure 76. Utilization of available quota in the Gulf of Mexico Grouper-Tilefish IFQ Program

ii. Effort

In the initial year of the IFQ Program, 766 entities held Grouper-Tilefish shares (Figure 77). The number of active vessels decreased by 26% from 631 vessels in the Baseline Period to 468 vessels in 2010 (Figure 78). The number of trips landing grouper-tilefish also decreased by a quarter in 2010 when compared to the Baseline Period (Figure 79). Days spent fishing for grouper-tilefish decreased by 35% from approximately 34,000 days in the Baseline Period to 22,000 days in 2010 (Figure 80). Prior to the implementation of the Gulf of Mexico Grouper-Tilefish IFQ Program, the season length varied across species. During the Baseline Period, fishermen were allowed to fish for shallow-water groupers throughout the year; however, the average season length was 153 days for deepwater groupers and 124 days for tilefishes. Implementation of the IFQ Program allowed the fishing season to be open for the entire year for the five grouper-tilefish management units (Figure 81). However, despite having a year round season, actual days fished by IFQ fishermen are constrained by the amount of IFQ quota they possess.

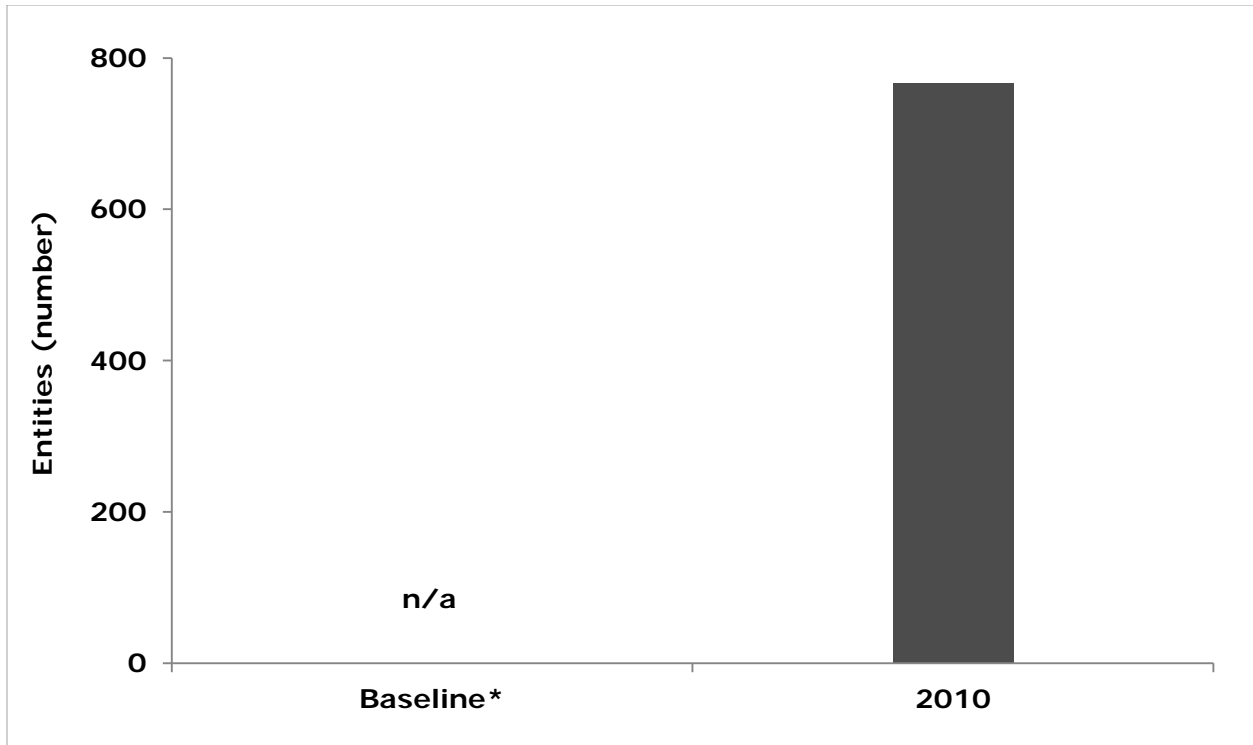


Figure 77. Number of entities holding share in the Gulf of Mexico Grouper-Tilefish IFQ Program

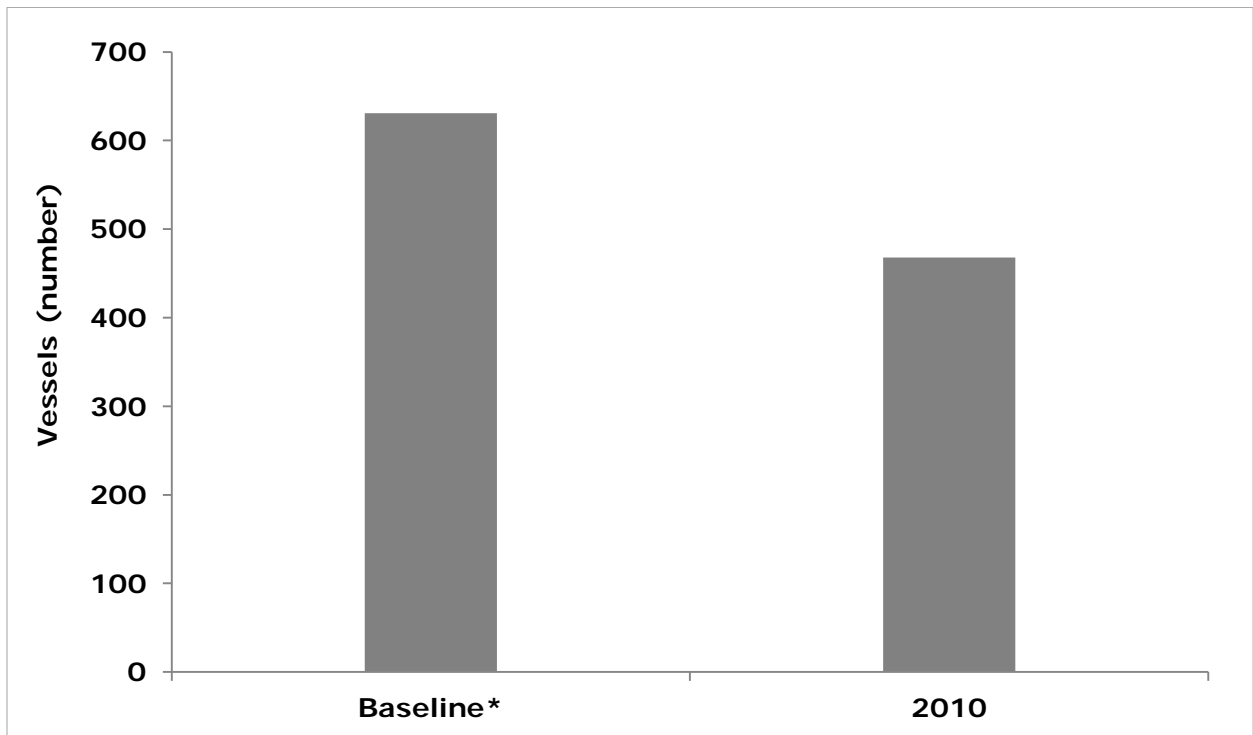


Figure 78. Active vessels fishing quota in the Gulf of Mexico Grouper-Tilefish IFQ Program

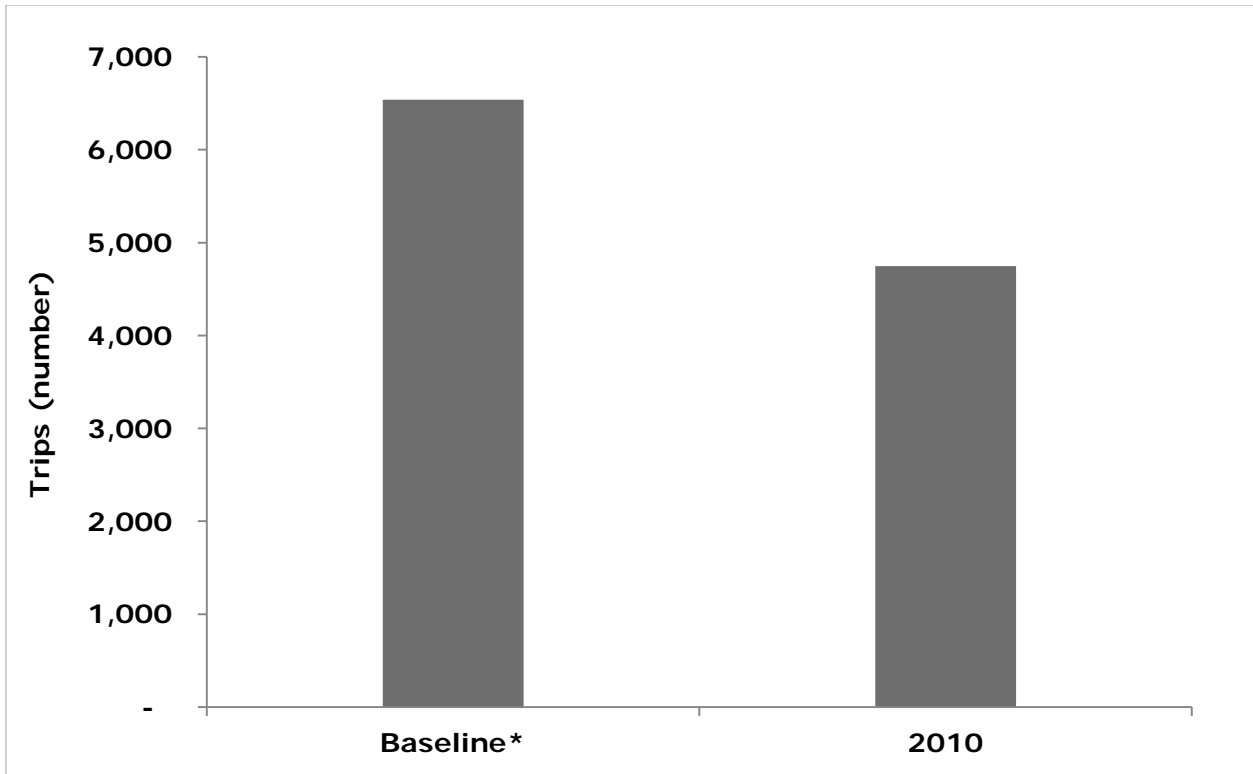


Figure 79. Number of trips harvesting grouper-tilefish in the Gulf of Mexico Grouper-Tilefish IFQ Program

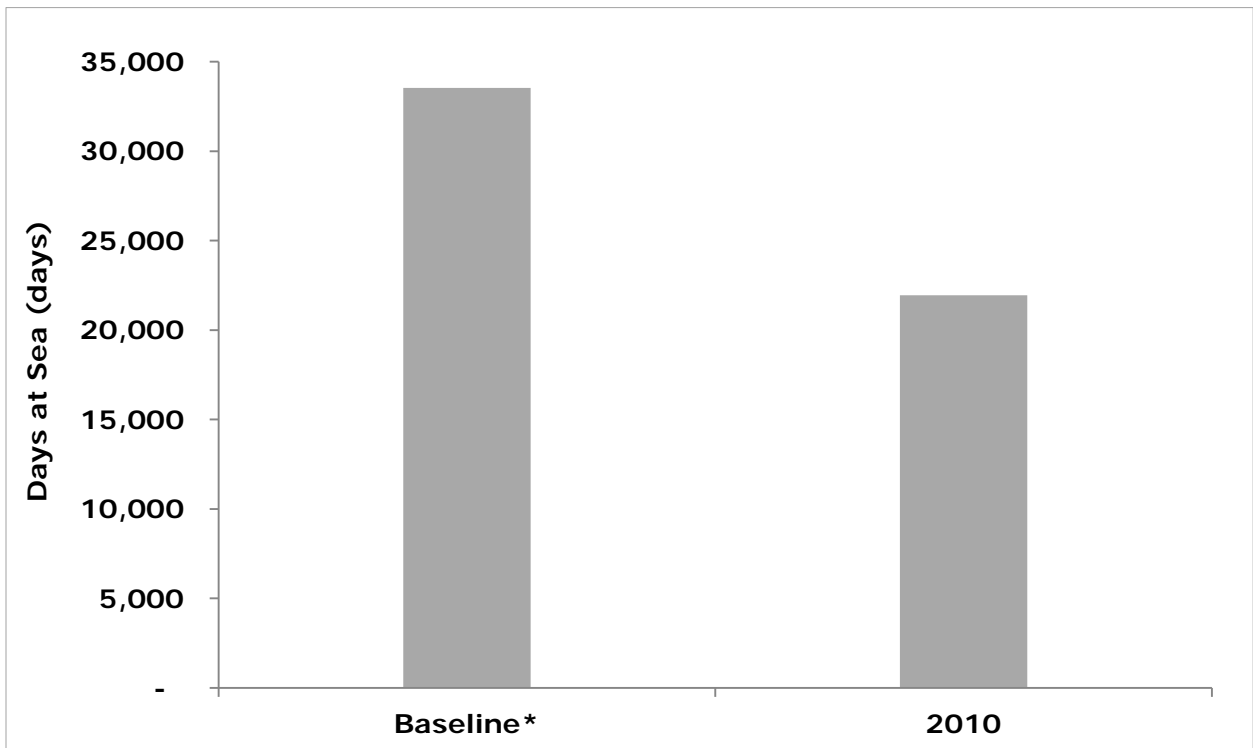


Figure 80. Number of days at sea on trips fishing quota in the Gulf of Mexico Grouper-Tilefish IFQ Program

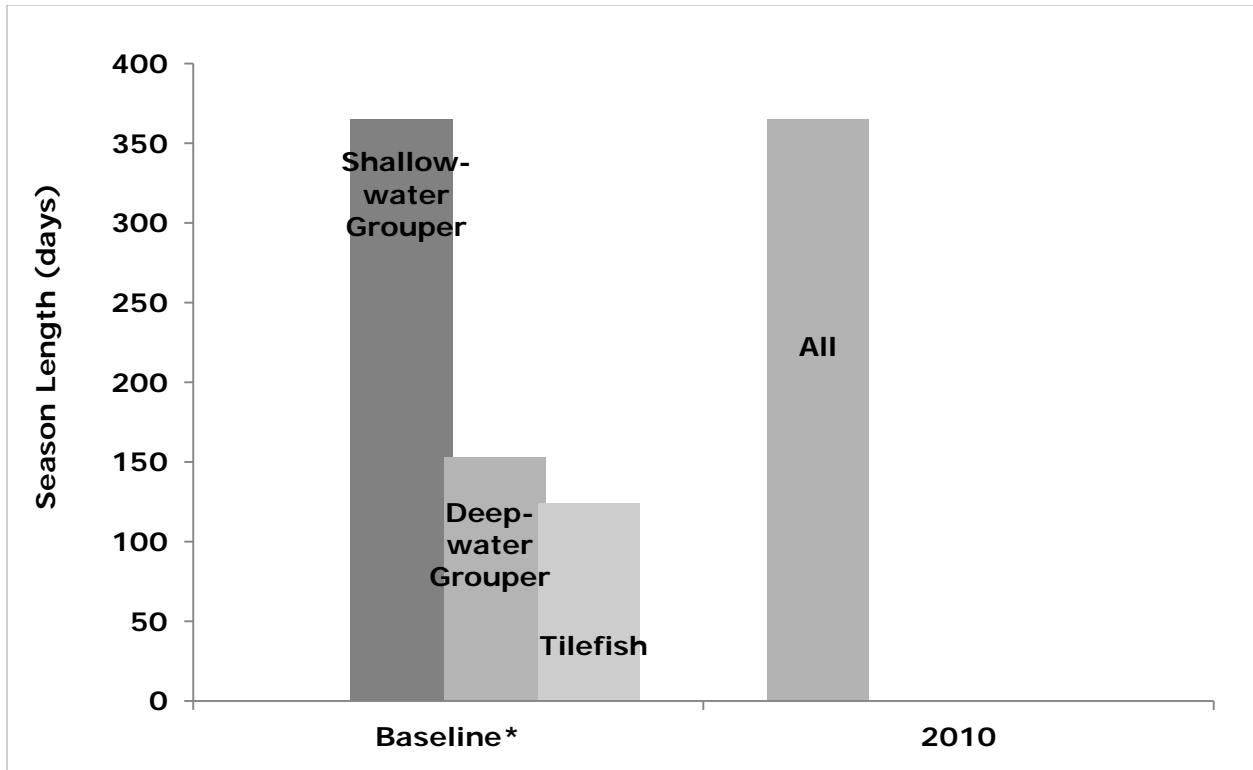


Figure 81. Season length (days) in the Gulf of Mexico Grouper-Tilefish IFQ Program

- iii. Revenue – All revenue and cost recovery data have been adjusted by the GDP deflator indexed for 2010.

Grouper-tilefish revenue was \$14 million in 2010, approximately a third less than the revenue during the Baseline Period (Figure 82). Revenue from species other than grouper-tilefishes was also reduced by 10% in 2010 when compared to the Baseline Period. Revenue from non-grouper-tilefish species comprised 40% and 47% of the total revenue during the Baseline Period and in 2010, respectively. Average prices for grouper-tilefishes increased slightly from \$3.16 in the Baseline Period to \$3.23 in 2010 (Figure 83). Estimates of the average ex-vessel price per pound of groupers and tilefishes may be underestimated due to changes in reporting practices since implementation of the IFQ Program.

Grouper-tilefish revenue per vessel decreased by about 10% to \$30,000 in 2010 compared to the Baseline Period (Figure 84); however, non-grouper-tilefish revenue per vessel increased by 20% to \$28,000 in 2010. The increase in non-grouper-tilefish revenue per vessel offset the decreased grouper-tilefish revenue per vessel meaning that total revenue of grouper-tilefish vessels increased slightly by 2% to \$58,000 in 2010.

Grouper-tilefish revenue per day was approximately the same in 2010 (\$654) when compared to the Baseline Period (\$645; Figure 85). However, non-grouper-tilefish revenue per day increased by 36% to \$589. Grouper-tilefish revenue per trip decreased by about 10% in 2010 (\$3,000) when compared to the Baseline Period (\$3,300; Figure 86). However, non-grouper-tilefish revenue per trip increased by 22% to \$2,700.

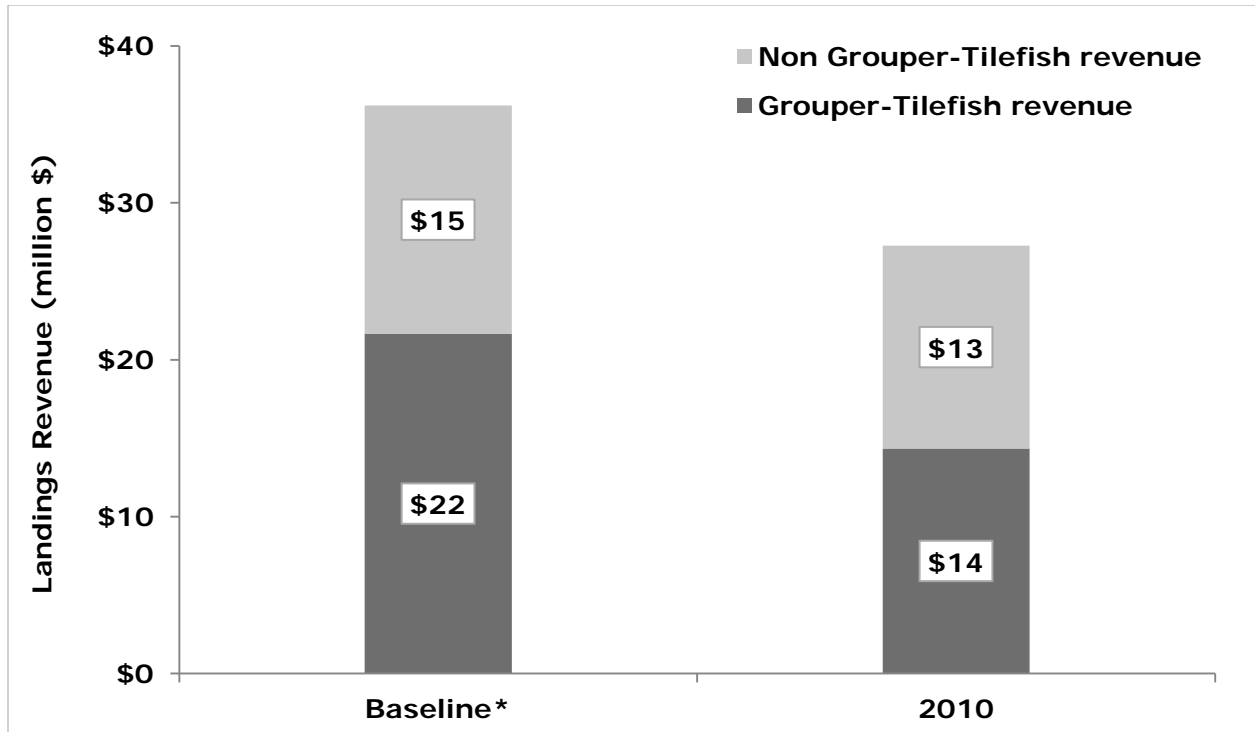


Figure 82. Total grouper-tilefish and non-grouper-tilefish revenue (inflation-adjusted 2010 dollars) by vessels fishing quota in the Gulf of Mexico Grouper-Tilefish IFQ Program

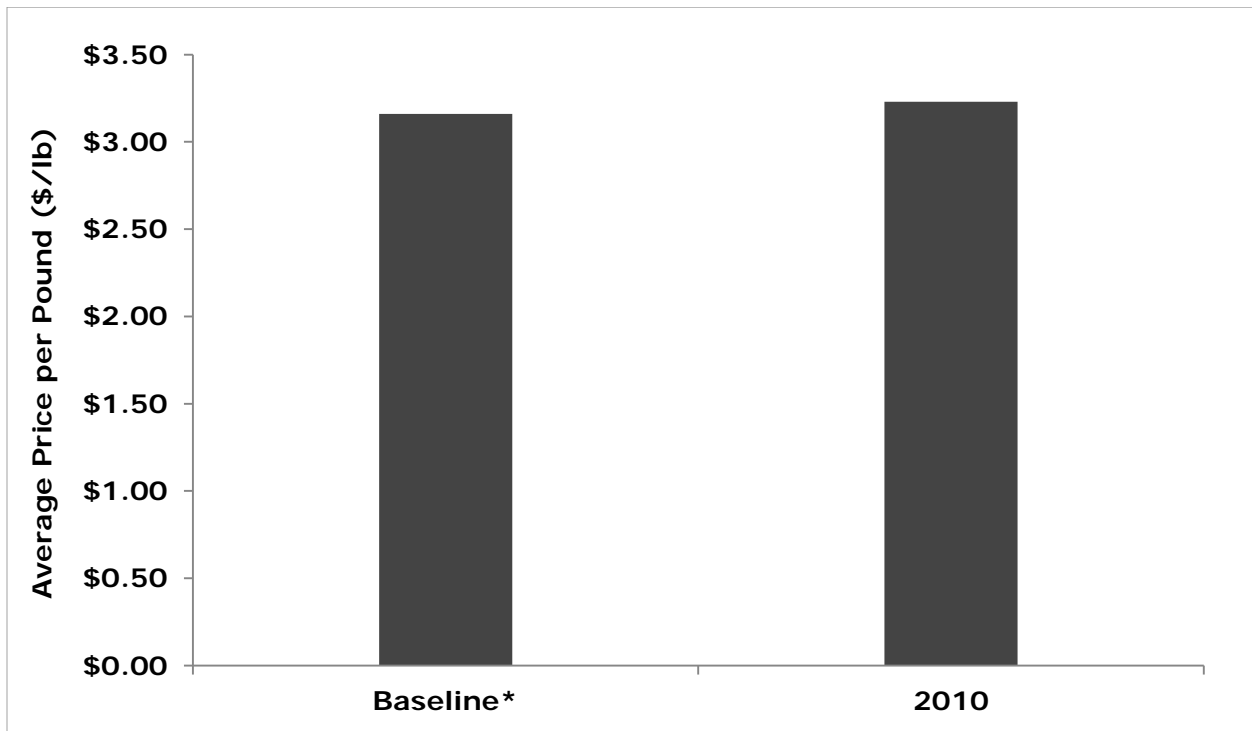


Figure 83. Average combined grouper-tilefish species price per pound (inflation-adjusted 2010 dollars) in the Gulf of Mexico Grouper-Tilefish IFQ Program

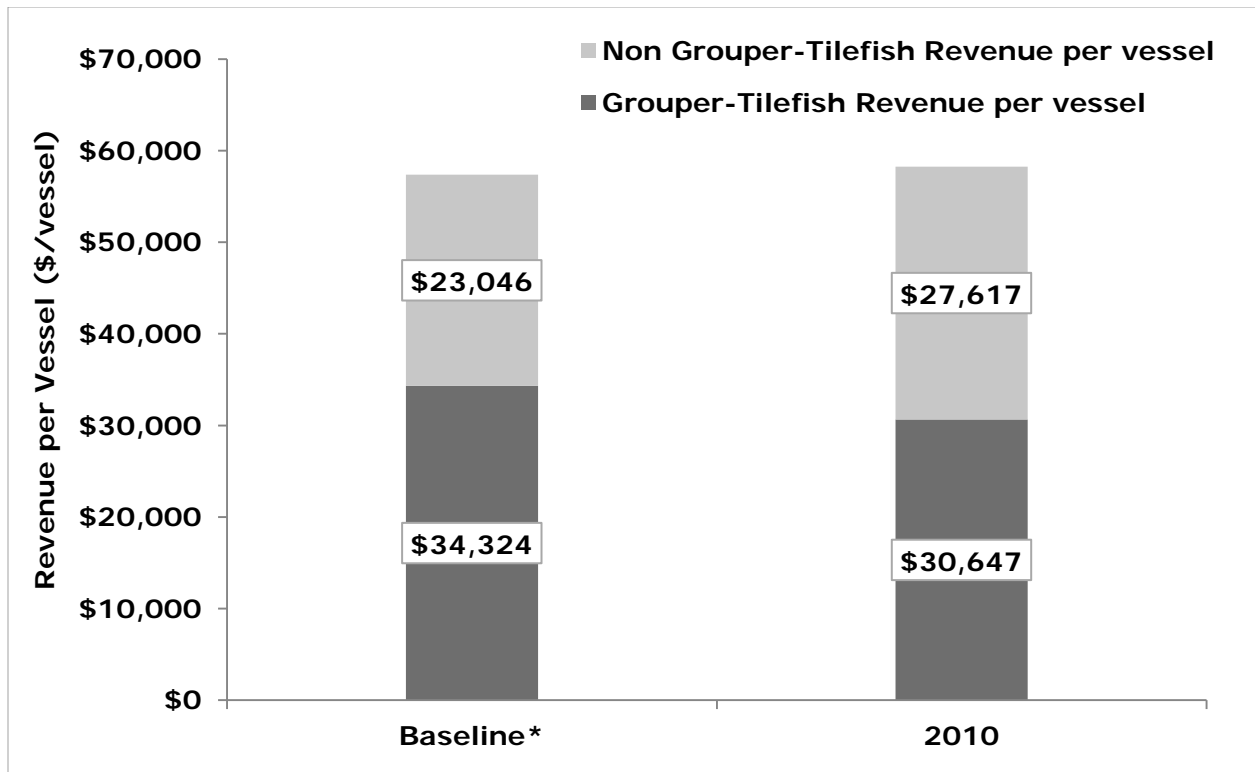


Figure 84. Grouper-tilefish and non-grouper-tilefish revenue (inflation-adjusted 2010 dollars) per vessel fishing quota in the Gulf of Mexico Grouper-Tilefish IFQ Program

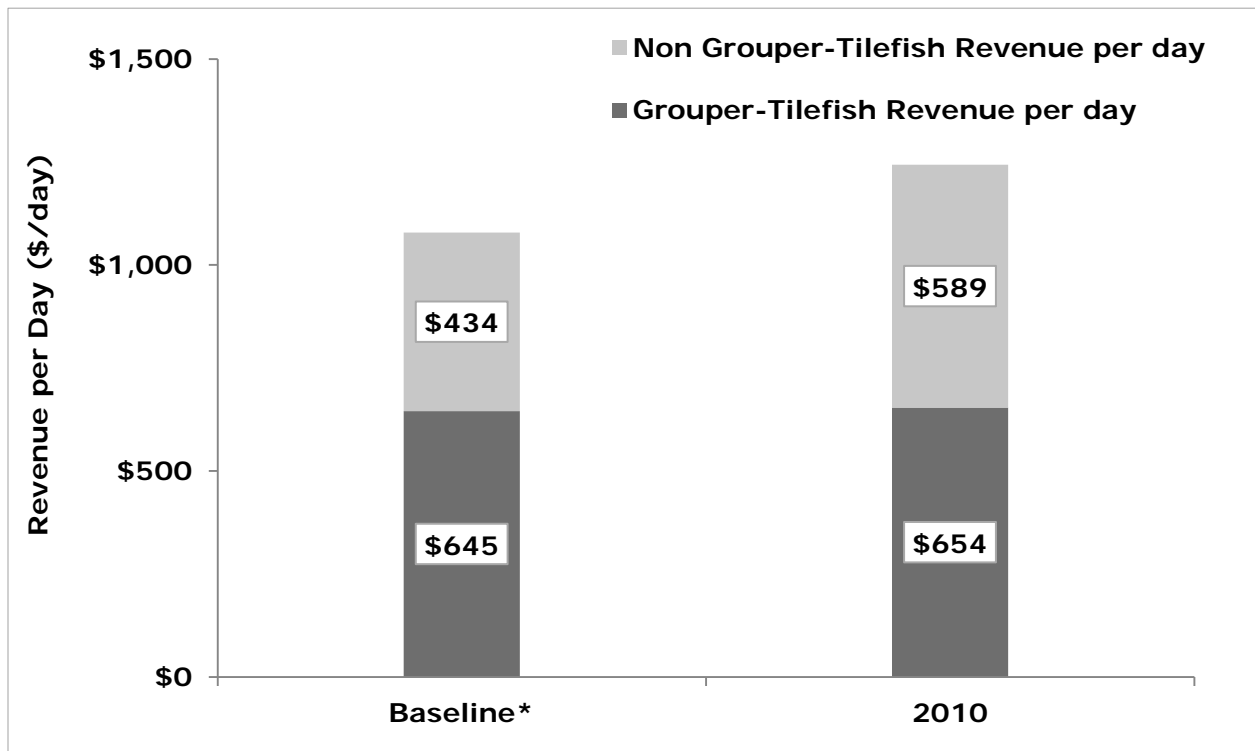


Figure 85. Grouper-tilefish and non-grouper-tilefish revenue (inflation adjusted 2010 dollars) per day at sea fishing quota in the Gulf of Mexico Grouper-Tilefish IFQ Program

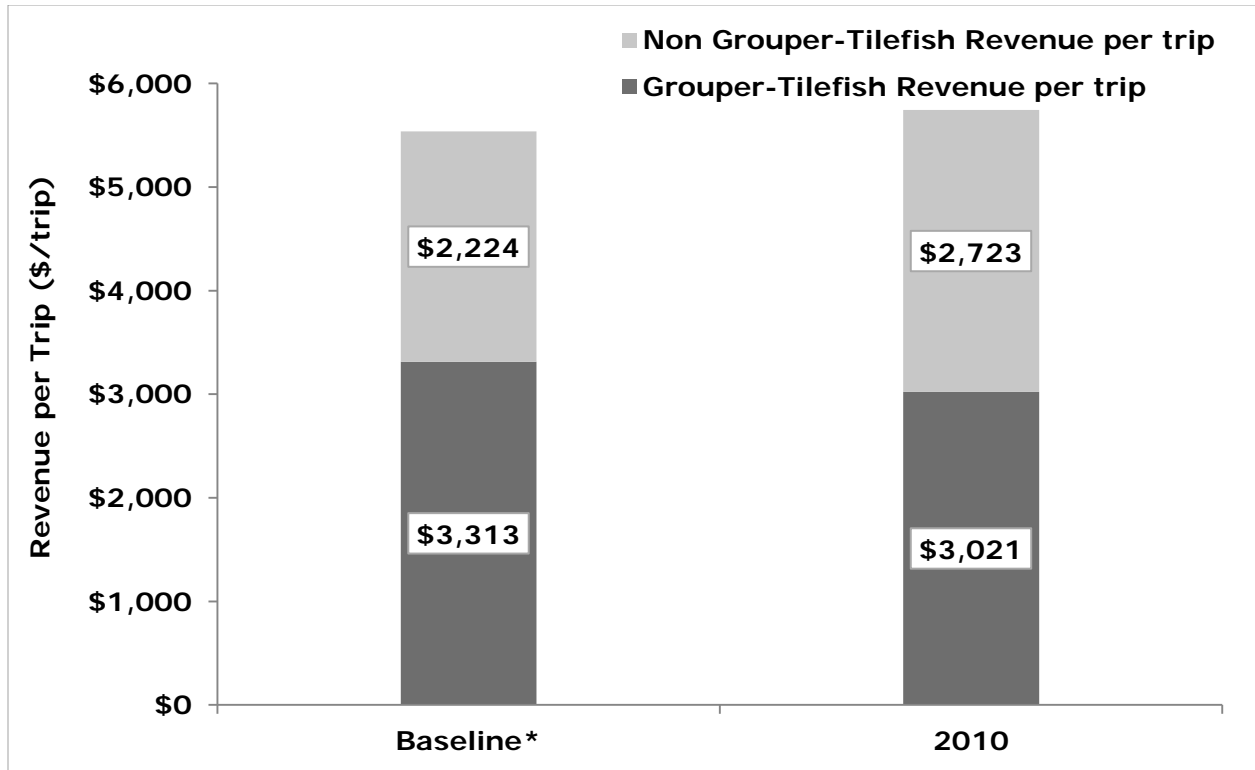


Figure 86. Grouper-tilefish and non-grouper-tilefish revenue (inflation adjusted 2010 dollars) per trip that vessels fish quota in the Gulf of Mexico Grouper-Tilefish IFQ Program