

Yield, Threshold Number of Permits, and Transit Provisions



Draft Options for Amendment 17B to the Fishery Management Plan for the Shrimp Fishery of the Gulf of Mexico, U.S. Waters

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Gulf of Mexico Shrimp Amendment 17B

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Type of Action

Administrative
 Draft

Legislative
 Final

ABBREVIATIONS USED IN THIS DOCUMENT

ACL	annual catch limit
AM	accountability measure
AP	advisory panel
Biop	biological opinion
BRD	bycatch reduction device
CPUE	catch per unit effort
Council	Gulf of Mexico Fishery Management Council
EA	Environmental Assessment
EEZ	exclusive economic zone
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
ELB	electronic logbook
ESA	Endangered Species Act
FMP	Fishery Management Plan
F _{MSY}	fishing mortality at MSY
GLM	General Linear Model
GMFMC	Gulf of Mexico Fishery Management Council
GSS	Gulf shrimp system
Gulf	Gulf of Mexico
lbs	pounds
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
MSY	maximum sustainable yield
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
OY	optimum yield
RA	Regional Administrator
Reserve Pool	Gulf Shrimp Vessel Permit Reserve Pool
SEFSC	Southeast Fisheries Science Center
SEIS	Supplemental Environmental Impact Statement
SERO	Southeast Regional Office of NMFS
SEWG	Ad Hoc Shrimp Effort Working Group
South Atlantic Council	South Atlantic Fishery Management Council
USCG	United States Coast Guard
VMS	vessel monitoring systems

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FISHERY IMPACT STATEMENT

[This statement is completed after selection of all preferred alternatives.]

CHAPTER 1. INTRODUCTION

1.1 Background

The Gulf of Mexico Fishery Management Council (Council) and the National Marine Fisheries Service (NMFS) began managing the shrimp fishery in the Gulf of Mexico (Gulf) in 1981. Four species are included in the fishery management plan: brown shrimp, *Farfantepenaeus aztecus*; pink shrimp, *Farfantepenaeus duorarum*; white shrimp, *Litopenaeus setiferus*; and royal red shrimp, *Pleoticus robustus*.

After the establishment of the federal permit in 2006, the shrimp fishery experienced economic losses, primarily due to high fuel costs and reduced prices caused by competition with imports. These economic losses resulted in the exodus of vessels from the fishery, and consequently, reduction of effort. In Amendment 13 (GMFMC 2005), the Council determined that the number of vessels in the offshore shrimp fleet would likely decline to a point where the fishery again became profitable for the remaining participants, and new vessels might want to enter the fishery; thus, the Council established the federal Gulf shrimp permit moratorium to prevent overcapitalizing the fishery if it became profitable again. The final rule implementing the moratorium was effective October 26, 2006 and permits became effective in March 2007. The Council is currently addressing the expiration of the moratorium in 2016 in Shrimp Amendment 17A.

Several issues have been identified with the upcoming expiration of the moratorium. Namely, optimum yield (OY) is still defined as equal to maximum sustainable yield (MSY) and MSY is defined for individual species (not the whole fishery), the number of permits has continued to decline and there is fear that these declines will continue indefinitely. In Amendment 17A, the Council considered whether to let the permit moratorium expire, extend the moratorium, or to create a limited access system. As the preferred alternative is to extend the moratorium, this is an opportune time for the Council to review the OY and determine the appropriate number of permits necessary to achieve OY on a continuing basis in the shrimp fishery.

Currently, any federal Gulf shrimp moratorium permit issued by the NMFS Southeast Regional Office (SERO) is valid for one year and is renewable within one year of expiring. As of September 8, 2015, 1,464 moratorium permits were valid or renewable. After the expiration date, the holder of a limited access or moratorium permit has an additional year to renew the permit. If a permit is not renewed within one year of the expiration date, it is terminated; i.e., it is no longer renewable or transferable, and effectively ceases to exist. Through non-renewal, 469 Gulf shrimp permits have been terminated during the moratorium (Table 1.1.1). The Council seeks to determine the appropriate number of permits for the fishery and what action to take if the number of permits dips below the specified threshold number. Other fisheries, such as the American Samoa longline fishery, have an established limited entry program that makes permits available when the number of permits falls below the maximum number. Priority is given to those with historical participation in the fishery for different class sized vessels (Class A gets first priority, followed by Class B, etc.). If there is a tie between priority rankings, applicants are selected (from the tied individuals) by lottery.

Table 1.1.1. Number of valid, surrendered, and terminated Gulf commercial shrimp permits as of December 31 each year since implementation of the moratorium. Valid permits are those that were fishable at least one day each year. Surrendered permits are those that were voluntarily returned to NMFS by the permit holder – these permits were valid for part of the year, before being lost from the fishery. Terminated permits are those that were lost from the fishery due to non-renewal by the permit holder.

Year	Number of Valid Permits Each Year	Number of Surrendered Permits Each Year	Number of Permits Terminated Each Year*	Cumulative Number of Permits Lost from the Fishery
2007	1,933	0	NA	NA
2008	1,907	0	26	26
2009	1,722	1	184	211
2010	1,633	1	88	300
2011	1,582	0	51	351
2012	1,534	0	48	399
2013	1,501	0	33	432
2014	1,470	0	31	463
2015*	1,464	0	4	469

*Through September 8, 2015.

Source: NMFS Southeast Regional Office (SERO) Permits Database

At the August 2015 Council meeting, it was brought to the Council’s attention that state licensed shrimping vessels (lacking a federal Gulf shrimp permit) cannot transit through federal waters with shrimp on board. There are some federal waters (such as off the coast of Louisiana and Mississippi) that state permitted shrimping vessels would like to transit through to return to state waters. The Council will consider a transit provision to address these concerns from the community.

1.2 Purpose and Need

Purpose for Action

The purposes are to define the optimum yield, determine the appropriate number of permits to achieve optimum yield on a continuing basis, consider measures to maintain the appropriate number of permits for the federal Gulf shrimp fishery without increasing bycatch, and to develop provisions for non-federally permitted shrimping vessels to transit through federal waters while not actively shrimping.

Need for Action

The needs for this action are to ascertain the appropriate metric(s) to manage the shrimp fishery, maintain increases in catch efficiency without substantially reducing landings, promote economic efficiency and stability in the fishery, provide flexibility for state registered shrimp vessels, and protect federally managed Gulf shrimp stocks.

1.3 History of Management

The Fishery Management Plan for the Shrimp Fishery of the Gulf of Mexico, U.S. Waters (FMP), supported by an environmental impact statement (EIS), was implemented on May 15, 1981. The FMP defined the shrimp fishery management unit to include brown shrimp, white shrimp, pink shrimp, royal red shrimp, seabobs (*Xiphopenaeus kroyeri*), and brown rock shrimp (*Sicyonia brevirostris*). Seabobs and rock shrimp were subsequently removed from the FMP. The actions implemented through the FMP and its subsequent amendments have addressed the following objectives:

1. Optimize the yield from shrimp recruited to the fishery.
2. Encourage habitat protection measures to prevent undue loss of shrimp habitat.
3. Coordinate the development of shrimp management measures by the Gulf of Mexico Fishery Management Council (Council) with the shrimp management programs of the several states, when feasible.
4. Promote consistency with the Endangered Species Act and the Marine Mammal Protection Act.
5. Minimize the incidental capture of finfish by shrimpers, when appropriate.
6. Minimize conflict between shrimp and stone crab fishermen.
7. Minimize adverse effects of obstructions to shrimp trawling.
8. Provide for a statistical reporting system.

The purpose of the plan was to enhance yield in volume and value by deferring harvest of small shrimp to provide for growth. The main actions included: 1) establishing a cooperative Tortugas

Shrimp Sanctuary with Florida to close a shrimp trawling area where small pink shrimp comprise the majority of the population most of the time; 2) a cooperative 45-day seasonal closure with Texas to protect small brown shrimp emigrating from bay nursery areas; and 3) a seasonal closure of an area east of the Dry Tortugas to avoid gear conflicts with stone crab fishermen.

Amendment 1/environmental assessment (EA)(1981) provided the Regional Administrator (RA) of SERO with the authority (after conferring with the Council) to adjust by regulatory amendment the size of the Tortugas Sanctuary or the extent of the Texas closure, or to eliminate either closure for one year.

Amendment 2/EA (1983) updated catch and economic data in the FMP.

Amendment 3/EA (1984) resolved a shrimp-stone crab gear conflict on the west-central coast of Florida.

Amendment 4/EA (1988) identified problems that developed in the fishery and revised the objectives of the FMP accordingly. The annual review process for the Tortugas Sanctuary was simplified, and the Council and RA review for the Texas closure was extended to February 1. A provision that white shrimp taken in the exclusive economic zone (EEZ) be landed in accordance with a state's size/possession regulations to provide consistency and facilitate enforcement with Louisiana was to have been implemented at such time when Louisiana provided for an incidental catch of undersized white shrimp in the fishery for seabobs. This provision was disapproved by NMFS with the recommendation that it be resubmitted under the expedited 60-day Secretarial review schedule after Louisiana provided for a bycatch of undersized white shrimp in the directed fishery for seabobs. This resubmission was made in February of 1990 and applied to white shrimp taken in the EEZ and landed in Louisiana. It was approved and implemented in May of 1990.

In July 1989, NMFS published revised guidelines for FMPs that interpretatively addressed the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (then called the Magnuson Fishery Conservation and Management Act) National Standards (50 CFR 602). These guidelines required each FMP to include a scientifically measurable definition of overfishing and an action plan to arrest overfishing should it occur.

Amendment 5/EA (1991) defined overfishing for Gulf brown, pink, and royal red shrimp and provided measures to restore overfished stocks if overfishing should occur. Action on the definition of overfishing for white shrimp was deferred, and seabobs and rock shrimp were removed from the management unit. The duration of the seasonal closure to shrimping off Texas was adjusted to conform to the changes in state regulations.

Amendment 6/EA (1992) eliminated the annual reports and reviews of the Tortugas Shrimp Sanctuary in favor of monitoring and an annual stock assessment. Three seasonally opened areas within the sanctuary continue to open seasonally, without need for annual action. A proposed definition of overfishing of white shrimp was rejected by NMFS because it was not based on the best available data.

Amendment 7/EA (1994) defined overfishing for white shrimp and provided for future updating of overfishing indices for brown, white, and pink shrimp as new data become available. A total allowable level of foreign fishing for royal red shrimp was eliminated; however, a redefinition of overfishing for this species was disapproved.

Amendment 8/EA (1995), implemented in early 1996, addressed management of royal red shrimp. It established a procedure that would allow total allowable catch for royal red shrimp to be set up to 30% above MSY for no more than two consecutive years so that a better estimate of MSY could be determined. This action was subsequently negated by the 1996 Sustainable Fisheries Act amendment to the Magnuson-Stevens Act that defined overfishing as a fishing level that jeopardizes the capacity of a stock to maintain MSY, and does not allow OY to exceed MSY.

Amendment 9/supplemental environmental impact statement (SEIS) (1997) required the use of a NMFS certified bycatch reduction device (BRD) in shrimp trawls used in the EEZ from Cape San Blas, Florida to the Texas/Mexico border, and provided for the certification of BRDs and specifications for the placement and construction. The purpose of this action was to reduce the bycatch mortality of juvenile red snapper by 44% from the average mortality for the years 1984 through 1989 (the required bycatch reduction was reduced to 30% in 2008 through a framework action). This amendment exempted shrimp trawls fishing for royal red shrimp seaward of the 100-fathom contour, as well as groundfish and butterfish trawls, from the BRD requirement. It also excluded small try nets and no more than two ridged frame roller trawls of limited size. Amendment 9 also provided mechanisms to change the bycatch reduction criterion and to certify additional BRDs.

Amendment 10/EA (2002) required BRDs in shrimp trawls used in the Gulf east of Cape San Blas, Florida. Certified BRDs for this area are required to demonstrate a 30% reduction by weight of finfish.

Amendment 11/EA (2001) required owners and operators of all vessels harvesting shrimp from the EEZ of the Gulf to obtain a federal commercial vessel permit. This amendment also prohibited the use of traps to harvest royal red shrimp from the Gulf and prohibited the transfer of royal red shrimp at sea.

Amendment 12/EA (2001) was included as part of the Generic Essential Fish Habitat (EFH) Amendment that established EFH for shrimp in the Gulf.

Amendment 13/EA (2005) established an endorsement to the federal shrimp vessel permit for vessels harvesting royal red shrimp; defined the overfishing and overfished thresholds for royal red shrimp; defined MSY and OY for the penaeid shrimp stocks in the Gulf; established bycatch reporting methodologies and improved collection of shrimping effort data in the EEZ; required completion of a Gulf Shrimp Vessel and Gear Characterization Form by vessels with federal shrimp permits; established a moratorium on the issuance of federal commercial shrimp vessel permits; and required reporting and certification of landings during the moratorium.

Amendment 14/EIS (2007) was a joint amendment with Reef Fish Amendment 27. It established a target red snapper bycatch mortality goal for the shrimp fishery in the western Gulf and defined seasonal closure restrictions that can be used to manage shrimp fishing efforts in relation to the target red snapper bycatch mortality reduction goal. It also established a framework procedure to streamline the management of shrimp fishing effort in the western Gulf.

The Generic Annual Catch Limit (ACL)/Accountability Measures (AMs) Amendment/EIS (2011) set an ACL and AM for royal red shrimp. Penaeid shrimp were exempt from the ACL/AM requirements because of their annual life cycle.

The Shrimp Electronic Logbook (ELB) Framework Action (2013) established a cost-sharing system for the ELB program, and described new equipment and procedures for the program.

Amendment 15/EA (2015), if implemented, would redefine stock status criteria for the three penaeid species of shrimp, including species-specific MSY values and overfished/overfishing thresholds. The general framework procedure would also be updated.

Amendment 16/SEIS (2015) eliminated duplicative AMs and the quota for royal red shrimp. The ACL was set equal to the acceptable biological catch and a post-season AM was established.

CHAPTER 2. MANAGEMENT ALTERNATIVES

Action 1. Aggregate Maximum Sustainable Yield (MSY) for the Gulf of Mexico (Gulf) Shrimp Fishery

Note: Aggregate means for all federally managed shrimp species combined. MSY for each species is already established. Aggregate MSY does not equal the sum of the individual species MSYs.

Alternative 1. No Action. Do not establish an aggregate MSY for the federal fishery.

Alternative 2. Establish aggregate MSY using the method developed by the Shrimp Effort Working Group (SEWG). For the federal commercial Gulf shrimp fishery, aggregate MSY = 109,237,618 lbs of tails. **AP Preferred**

Discussion: In Amendment 15 to the Fishery Management Plan for the Shrimp Fishery of the Gulf of Mexico, U.S. Waters (FMP), the Gulf of Mexico Fishery Management Council (Council) determined species specific MSYs for penaeid shrimp. However, an aggregate MSY is most appropriate for management of the fishery in federal waters. In March 2016, a working group was convened to determine the appropriate aggregate MSY for the shrimp fishery in federal waters. The working group decided to use the same general approach used by the ad hoc shrimp effort working group (SEWG) (Nance et al. 2006), except that the group determined it was no longer possible to estimate catch and effort in federal waters with a reasonable degree of scientific certainty due to data limitations. Catch and effort in offshore waters were determined to be the best available proxies for catch and effort in federal waters. In the 2006 report, effort and aggregate MSY were calculated by the SEWG using two methods: the “pooled” approach used by the Galveston Lab and the General Linear Model (GLM) developed by Griffin et al. (1997). For current purposes, the group decided to use the pooled approach because that model is currently being used for shrimp stock assessment purposes and the GLM model has not been used or updated in recent years. Using methods from the SEWG with the most recent years of data included (1990-2013), the estimated yield curve (Figure 2.2.1) for the offshore fishery produced by the model indicates that aggregate MSY is 109,237,618 lbs (tails) and effort at MSY is 143,756 days fished. The aggregate MSY for the offshore fishery is somewhat less than the summation of all individual species’ Gulf-wide MSYs. Model results should only be used to review previously observed data and should not be used to predict what catch/landings would be at effort levels above or below observed levels, as they are subject to yearly variations in the abundance of shrimp stocks.

Aggregate MSY is needed to determine aggregate OY which is the yield that National Standard 1 requires the fishery achieve on a continuing basis and takes into account economic, social, and ecological factors. With respect to aggregate MSY, the level of effort needed to achieve aggregate MSY in the offshore fishery was most closely observed in 2004 (Figure 2.2.1). Recent levels of effort have been well below the level needed to achieve aggregate MSY in the offshore fishery although in 2006 landings were above MSY. Based on observed effort in 2013, effort would need to increase by more than 126% from current levels to achieve aggregate MSY. It is

unlikely that the fishery needs to achieve aggregate MSY in order to attain aggregate OY. The Council may either choose to establish an aggregate MSY or not, but the Aggregate MSY-OY Working Group did not feel that there were viable alternatives to the aggregate MSY produced by the accepted model.

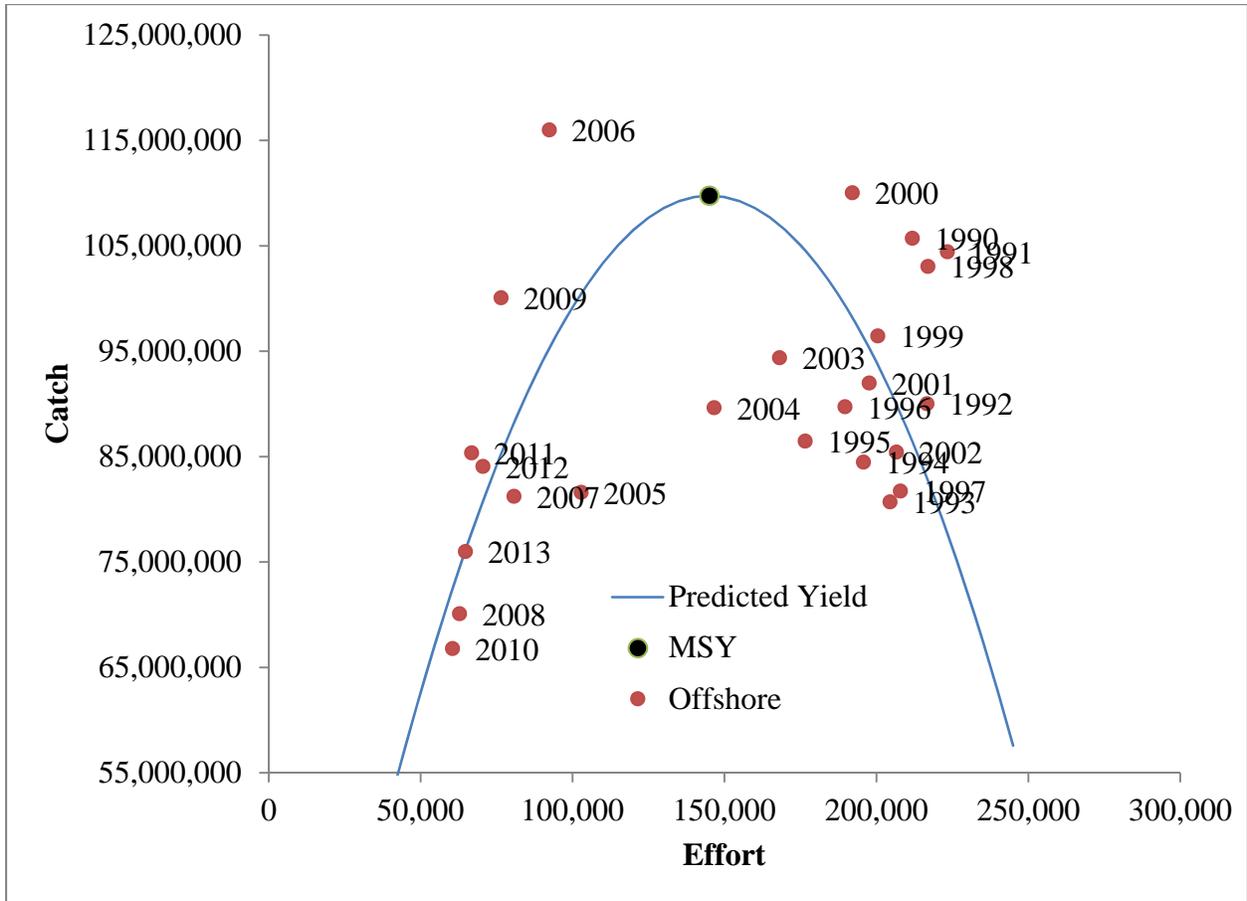


Figure 2.1.1. Graham Schaeffer production model used to estimate aggregate maximum sustainable yield (MSY) for the offshore component of the Gulf shrimp fishery showing model estimate and actual data points, 1990-2013.

Source: SEFSC, Galveston

Action 2. Aggregate Optimum Yield (OY) for the Gulf Shrimp Fishery

Note: Aggregate means for all federally managed shrimp species combined. OY for each species is already established. Aggregate OY does not equal the sum of the individual species OYs.

Alternative 1. No Action. Do not establish an aggregate OY.

Alternative 2. For the offshore fishery, aggregate OY = 85,368,059 lbs of tails which is MSY reduced for certain biological, social, and economic factors. **AP Preferred**

Discussion: The OY is the amount of fish that will provide the greatest overall benefit to the nation with respect to food production and recreational opportunities and is prescribed on the basis of MSY as it may be reduced by any relevant social, economic, or ecological factor. The National Standard 1 guidelines for the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) state that cannot exceed, but may be equal to, MSY target levels. The guidelines continue to note that the Councils should adopt a precautionary approach and set OY levels safely below limit reference points so they are “explicitly” risk averse.

Other Gulf FMPs have set OY in terms of a percentage of MSY or fishing mortality at MSY (F_{MSY}) (e.g., king mackerel OY is 85% F_{MSY}). The current definition of OY for the individual shrimp stocks is OY is equal to MSY. Aggregate OY would be achieved by determining what the appropriate value would be for all stocks, not individual species.

Action 1 would determine the aggregate MSY for the shrimp fishery based on the SEWG methodology. A working group was convened in March, 2016, to determine the appropriate aggregate OY for the shrimp fishery. The working group determined that there were four important factors to consider when establishing aggregate OY is: high landings, high catch per unit effort (CPUE), effort below the sea turtle bycatch threshold, and effort below the juvenile red snapper bycatch threshold. The working group concluded that the effort and associated predicted landings balanced all of these criteria in 2009 relative to other years. It should be noted that the juvenile red snapper bycatch threshold only pertains to effort exerted in the juvenile red snapper bycatch area (statistical zones 10-21, 10-30 fathoms) established in Shrimp Amendment 14, and the sea turtle bycatch effort threshold applies to all Gulf waters (i.e., inshore and offshore combined). However, based on the definition of OY in the NS1 Guidelines and the status of the shrimp fishery, the working group determined that an aggregate OY equal to the aggregate MSY is not appropriate. Similarly, setting aggregate OY as some percentage below aggregate MSY would need scientific rationale. Setting OY in terms of a percentage of F_{MSY} would require that each time F_{MSY} is re-evaluated, so too, would OY. The working group chose a point value based on the history of the fishery and felt that a complicated socio-bioeconomic model would require explicit weighting of criteria which would be subjective. The Aggregate MSY OY Working Group also felt that confidence intervals about the aggregate OY would be inappropriate because they are based on the point estimate. The working group also felt that any other alternative would be subjective; though the point estimate presented is

qualitative, it is based on historical data and a model that has been used for developing management benchmarks for shrimp.

Action 3. Minimum Threshold Number of Gulf Shrimp Vessel Permits

NOTE: This action does not actively remove any Gulf shrimp permits. The minimum threshold is only for purposes of monitoring changes in fishery participation and determining if additional management measures should be established.

Alternative 1. No Action. Do not set a threshold number of Gulf shrimp vessel permits.

Alternative 2. Set a threshold number of valid or renewable Gulf shrimp vessel permits based on the predicted number of active permitted vessels (those with landings from offshore waters) needed to attain aggregate OY in the offshore fishery (for Action 2 Alternative 2: 1,074 permits).
AP Preferred

Alternative 3. Set a threshold number of valid or renewable Gulf shrimp vessel permits based on the predicted number of active permitted vessels (those with landings from offshore waters) during 2009, which is the threshold level of effort for the incidental take statement for sea turtles in the 2014 biological opinion (1,074 permits).

IPT suggestion: Remove this alternative as it is the same number of permits as Alternative 2.

Alternative 4. Set a threshold number of valid or renewable Gulf shrimp vessel permits based on the predicted number of active permitted vessels (those with landings from offshore waters) during 2011 when effort was highest during the moratorium in the area monitored for red snapper juvenile mortality but without reaching the bycatch reduction threshold and triggering closures (938 permits).

Alternative 5. Set a threshold number of valid or renewable Gulf shrimp vessel permits based on the predicted number of active permitted vessels (those with landings from offshore waters) during 2008 when catch per unit effort (CPUE) in the offshore fishery was highest during the moratorium (882 permits).

Alternative 6. Set a threshold number of valid or renewable Gulf shrimp vessel permits based on the predicted number of active permitted vessels (those with landings from offshore waters) in a year with relatively high CPUE in the offshore fishery during the moratorium without substantially reduced landings.

Option 6a. 2007 (1,133 permits)

Option 6b. 2012 (990 permits)

Option 6c. 2013 (909 permits)

Alternative 7. Set a threshold number of valid or renewable Gulf shrimp vessel permits based on the number of valid permits at:

Option 7a. the beginning of the moratorium (1,933 permits)

Option 7b. the end of 2009 (1,722 permits)

Option 7c. the end of 2011 (1,582 permits)

Option 7d. the end of 2013 (1,501 permits)

Option 7e. the end of 2014 (1,470 permits)

Option f. the end of the initial moratorium, October 26, 2016 (number of permits unknown).

*Note: For **Alternative 7**, the number of permits has already decreased below the threshold, except **Option 7f**.*

Discussion: A passive decrease in the number of permits is an expected part of a moratorium or limited access permit. Permits are terminated if the holder does not renew the permit within one year of the expiration date. The federal Gulf commercial shrimp permit moratorium was based on the likelihood that, at some point in time, the number of vessels in the offshore shrimp fleet would decline to a point where the fishery again became profitable for the remaining participants. In Amendment 13, the Council determined that there was a need to prevent new effort from entering the fishery and thus negating, or at least lessening, profitability. Various members of the Council, the Council's Shrimp Advisory Panel (Shrimp AP), and the public have suggested the fishery has reached that point, and the decline in permits should end; others have suggested the time is still in the future. In any case, the Council may decide to set a minimum threshold for the number of permits in the Gulf shrimp fishery. If so, when the threshold is reached, the Council would need to determine if the termination of permits should be stopped.

Alternative 1 would not set a minimum threshold number of permits, and permits that were not renewed within one year of the expiration date would continue to be terminated. This is the practice for all other limited access permits issued by SERO. The number of Gulf shrimp permits would be expected to continue to decrease over time, although the rate of decrease would be expected to slow as fewer inactive permits remain. The Shrimp AP was concerned that the fleet would also continue to shrink because of vessel age and the high cost of replacement. These factors could cause the rate of attrition to increase in the future.

Alternatives 2-6 would set the minimum threshold number of permits based on a level of effort and number of active vessels that leads to a particular management goal: achieving OY, remaining below the effort threshold for turtle takes, remaining below the target effort level for juvenile red snapper bycatch, maintaining the highest CPUE, or balancing high CPUE and landings, respectively.

In 2014, NMFS issued a biological opinion (bi op) on the continued authorization of the Southeast U.S. shrimp fisheries in federal waters on threatened and endangered species and designated critical habitat, in accordance with Section 7 of the Endangered Species Act (ESA). The expectation in the bi op was that future total effort levels in the southeastern shrimp fisheries would remain at or below 2009 effort levels (Figure 2.3.1). Although the bi op allows for some annual fluctuation, any substantial increase in effort above the 2009 level would require re-initiation of consultation on the effect of the shrimp fishery on ESA-listed species; if captures of protected species increase, additional requirements for bycatch reduction could be imposed.

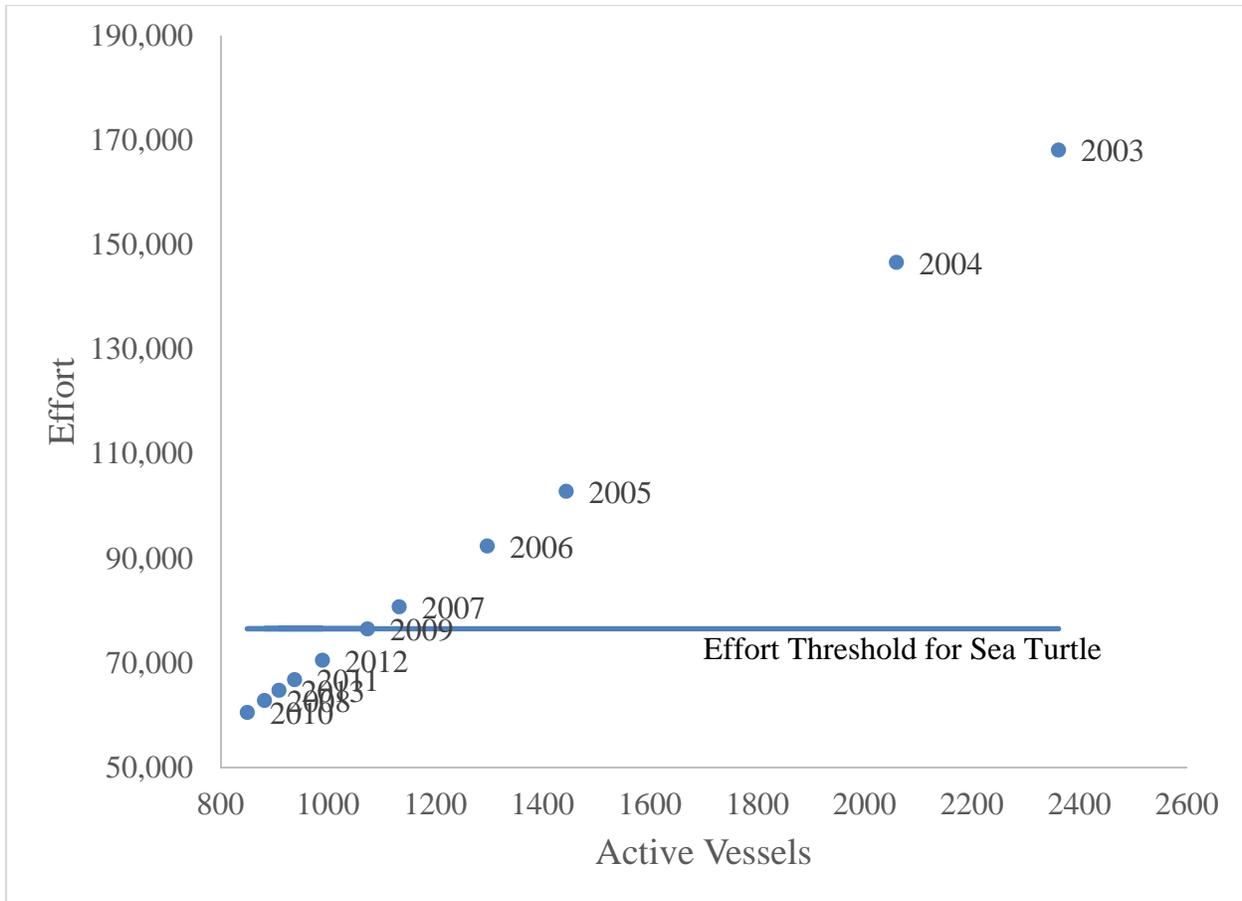


Figure 2.3.1. Number of active federally permitted shrimp vessels versus effort in days (24 hours) fishing. The blue line indicates the effort threshold set by the 2014 biological opinion; any effort above this level could result in an increase in sea turtle bycatch and would trigger a new consultation relative to the ESA.

Amendment 14 (GMFMC 2007) set a target shrimp effort level in specific areas of the western Gulf (statistical zones 10-21, 10-30 fathoms) to protect juvenile red snapper. This target was originally 74% less than the effort in the benchmark years of 2001-2003. The target was reduced in 2012 to 67% less than the benchmark years because the red snapper rebuilding plan was proceeding as planned. If effort in the area increases above this target, selected areas of federal waters must be closed to shrimp fishing.

An analysis of the relationship between active federally permitted vessels and offshore effort found a strong relationship (Appendix X). A vessel is considered to be active in a particular year if it had shrimp landings from Gulf offshore¹ waters according to the most current available Gulf Shrimp System (GSS) data. For example, if a vessel only had landings from inshore waters or another region (e.g., South Atlantic), it was not considered active in this analysis. Because the

¹ Gulf offshore waters includes some state waters, as well as federal waters. Though most of these vessels had federal permits, a federal permit is not required to harvest shrimp in state offshore waters. Thus, the number of active vessels in the offshore fishery will generally exceed the number of permitted or active permitted vessels.

number of federally permitted vessels is related to offshore effort, the Council can indirectly control or at least limit offshore effort by controlling the number of vessels with federal permits. By looking for the desired level of effort in past years, we can find the number of active vessels in the year that matches that effort threshold. However, the number of active vessels in any year is dependent on many factors, including abundance of shrimp. A model was used to predict the number of active permitted vessels needed to attain levels of effort observed in each year under average shrimp abundance (Appendix X, Table 2.3.1). Because the effort includes state offshore waters, the estimates are most likely overestimates of what is actually occurring in federal waters.

Table 2.3.1. Observed landings and CPUE for the offshore component of the Gulf shrimp fishery, landings and CPUE predicted with the same effort under average shrimp abundance conditions, and the number of vessels predicted to produce those landings under average shrimp abundance. Effort is in days (24 hours) fished and landings are in pounds of tails. See the text and Appendix X for details on how effort and predicted numbers were calculated.

Year	Effort	Observed Landings	Observed CPUE	Predicted Landings under Average Abundance	Predicted CPUE under Average Abundance	Predicted Active Permitted Vessels under Average Abundance
2003	168,135	94,372,801	561	106,975,942	640	2,361
2004	146,624	89,637,517	611	109,753,463	751	2,059
2005	102,840	81,611,212	794	100,483,450	979	1,444
2006	92,372	115,991,846	1,256	95,303,048	1,034	1,297
2007	80,733	81,228,888	1,006	88,199,291	1,094	1,133
2008	62,797	70,084,487	1,116	74,484,336	1,187	882
2009	76,508	100,070,591	1,308	85,271,120	1,116	1,074
2010	60,518	66,782,194	1,104	72,501,053	1,199	850
2011	66,777	85,357,173	1,278	77,817,764	1,167	938
2012	70,505	84,071,805	1,192	80,789,736	1,147	990
2013	64,764	75,992,480	1,173	76,152,288	1,177	909

Source: Landings are based on GSS data, J. Primrose, SEFSC Galveston, 7/10/15; effort and CPUE estimates, R. Hart, SEFSC Galveston, 7/15/15; predicted values, M. Travis, NMFS SERO, 7/17/15.

Note: A small percentage of the offshore landings in each year cannot be ascribed to a particular vessel because of missing or invalid vessel identifiers in the GSS data; this percentage has declined from 3% in 2003 to 0.6% in 2013. Because of missing or invalid vessel identifiers, the estimates of active vessels in Table 2.3.1 may be slightly underestimated.

Based on management objectives, the Council could set a minimum permit threshold based on effort desired that assumes all permitted vessels are active (i.e., the threshold would not allow for in active or latent permits). If the Council determines the threshold number of permits should allow for vessels that are not active in the offshore fishery each year (i.e., vessels that only participate in fishery in certain years), then it may want to consider adding a buffer to the provided estimates; a buffer is not currently included in each alternative. Reasons for not participating in the fishery in a year include, but are not limited to, illness of the vessel owner,

temporary loss of the vessel, poor economic conditions in the offshore fishery, or a decision to temporarily use the permitted vessel in another fishery.

Alternative 2 bases the minimum threshold number of permits on the predicted number of active permitted vessels that could harvest the aggregate OY in the offshore component of the shrimp fishery under average shrimp abundance. National Standard 1 of the Magnuson-Stevens Act says that management measures shall prevent overfishing while achieving, on a continuing basis, the OY from each fishery. Federal permits only apply to fishing in federal waters, but effort in only federal waters cannot be estimated with a high degree of scientific certainty because some state trip tickets do not require dealers to report whether landings come from federal or state waters. Therefore, the effort needed to harvest the aggregate OY for the offshore component is the best proxy to base the minimum threshold number of permits on to manage for OY. Because the effort includes state offshore waters, the estimates are most likely overestimates of what is actually occurring in federal waters. The actual number of permits set by this alternative depends on the aggregate OY chosen in Action 2. Alternative 2 in Action 2 is the OY recommended by the working group based on predicted effort in 2009. As stated in Action 2, the 2009 effort maintained fairly high landings and CPUEs, while still remaining below the thresholds for sea turtle and juvenile red snapper bycatch; thus this level of effort balances these factors to produce a yield that is optimal for the fishery.

Alternative 3 bases the minimum threshold number of permits on the predicted number of active permitted vessels during 2009, which is the threshold level of effort used to develop the sea turtle incidental take statement in the 2014 bi op. By setting the minimum threshold number of permits at the number of active vessels in 2009, the Council could indirectly control offshore effort and prevent greatly exceeding the effort levels used in the bi op.

Alternative 4 bases the minimum threshold number of permits on the predicted number of active permitted vessels during 2011, when effort was highest during the moratorium in the area monitored for red snapper juvenile mortality, but did not reach the current bycatch reduction target of 67%. In 2011, the effort level for the area exceeded the original target effort level; however, it was just below the new target effort level, which was in the process of being implemented (Figure 2.3.2). Therefore, the predicted number of active permitted vessels in that year could be considered a reasonable minimum threshold for the number of permits in the shrimp fishery.

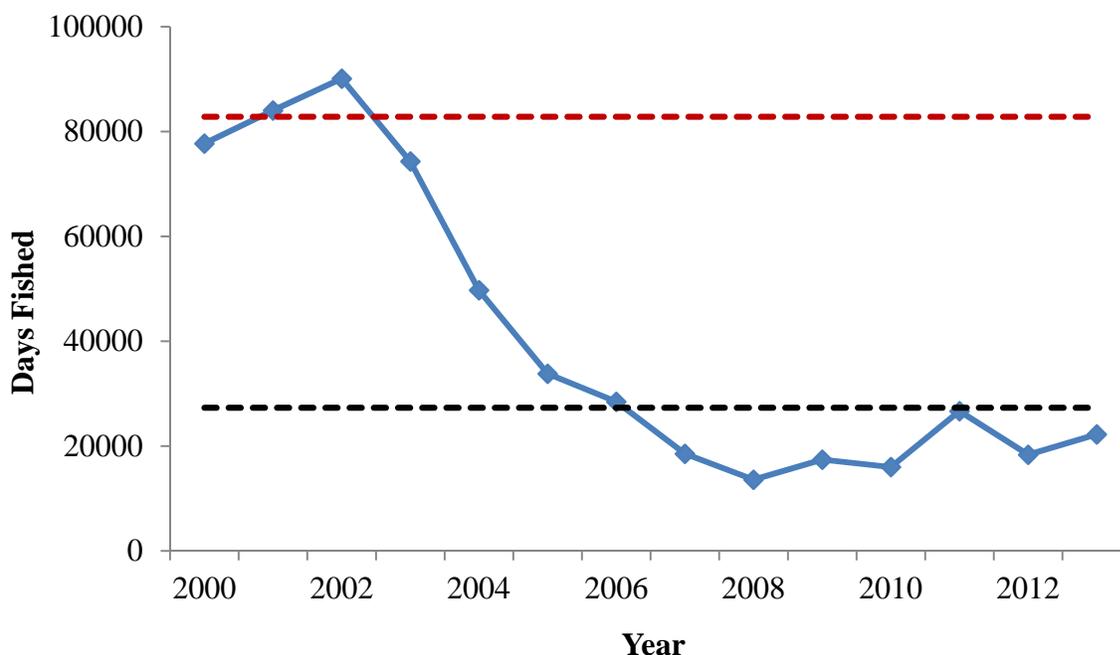


Figure 2.3.2. Offshore Gulf shrimp effort in statistical zones 10-21, 10-30 fathoms relative to target effort levels to reduce red snapper juvenile mortality. The upper (red) line shows the baseline 2001-2003 effort levels; the lower (black) line shows the target effort level of 67% of the baseline.

Source: SEFSC, Galveston.

Alternatives 5 and 6 would base the minimum threshold on a level of effort that could maintain high CPUE and high landings (Table 2.3.1); however, effort and landings are affected by many factors, including varying abundance of shrimp. For example, although observed landings were highest in 2006, this was due to higher shrimp abundance that year than the long-term average abundance. The level of effort seen in 2006 would not be expected to generate that same level of landings under average levels of shrimp abundance. Thus, observed levels should not be used to predict landings under average abundance conditions in the future. The same caution applies to using observed levels of CPUE. Although observed CPUE was highest in 2009, this result was similarly driven by above average abundance. It is not prudent to expect or rely on above average abundance conditions in the future. Instead, models for landings and CPUE can be used to generate values that would be expected under average shrimp abundance (see Appendix X) and thus are more reliable with respect to determining what to expect in the future (Table 2.3.1).

The minimum threshold in **Alternative 5** is based on the predicted number of active vessels when CPUE was highest during the moratorium. Predicted CPUE was highest in 2010, but this finding must be viewed with caution given the effects of the Deepwater Horizon MC252 oil spill on fishing behavior in 2010. It would be safer to conclude that CPUE was at its maximum in 2008. Economic conditions have led to substantial consolidation in this industry creating significant efficiency gains for the remaining participants. Although based on limited data (2006-2013), a linear regression model determined that annual net revenue per vessel was primarily driven by CPUE; ex-vessel shrimp price was slightly less important and fuel price was

even less important relative to CPUE (Appendix X). The consolidation and the resulting efficiency gains for fishermen would be locked in by maintaining the number of vessels that could harvest at a high CPUE. This was the objective of the moratorium stated in Amendment 13 (GMFMC 2005).

Observed CPUE was highest when effort was lowest (Figure 2.3.3). If 2010 is omitted, predicted CPUE was at its maximum in 2008. If the Council intends simply to maximize CPUE, the predicted number of active permitted vessels needed to attain effort observed in 2008 should be used to set the minimum threshold number of permits.

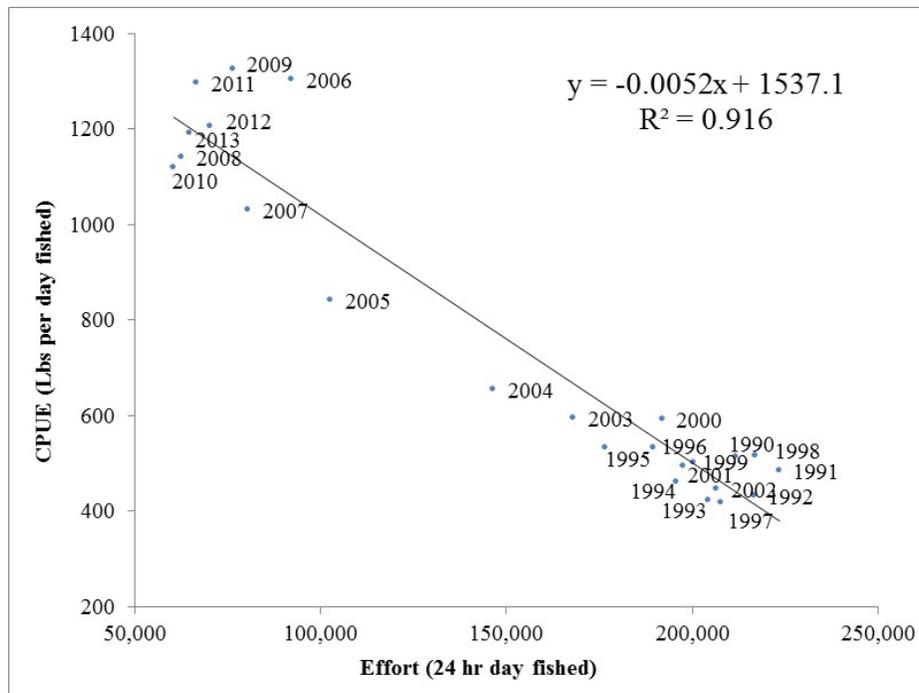


Figure 2.3.3. Relationship between CPUE and effort in the offshore component of the Gulf shrimp fishery, 1990-2013.

Source: SEFSC, Galveston

Reductions in observed effort and fleet size after 2007 have not caused substantial improvements in CPUE, but they have caused noticeable reductions in landings (Figure 2.1.1). **Alternative 6** is an attempt to balance the number of permits needed to maintain high CPUE values without allowing total landings to substantially decrease. Average predicted landings during the moratorium (79.32 mp) were 22% less than average predicted landings in 2004-2006 (101.80 mp). Any year during the moratorium could be chosen to represent a balance between CPUE and landings; the years included in **Options 6a-c** were requested by the Council at the August 2015 meeting.

Alternative 7, Options a-f base the minimum threshold number of permits on the valid number of permits at a certain period of time (Table 1.1.1). Choosing one of the options in **Alternative 7** would include inactive permits in the minimum threshold. In other words, the minimum threshold would be higher than the number of vessels needed to achieve the effort in each year. Because some permits are inactive each year due to vessel repairs, health issues, etc., a threshold

somewhat higher than the absolute number of vessels needed to maintain effort could be useful. However, maintaining a high number of inactive permits could provide an opportunity for a dramatic increase in effort that would reduce CPUE and economic efficiency for each vessel. The options include years of the moratorium with high CPUEs and landings, except 2010.

Option 7a presumes the number of permits at the beginning of the moratorium (1,933 permits) was, in fact, the appropriate number of permits to maintain in the shrimp fishery, and the decrease in permits since then has been undesirable. However, only 1,539 vessels with moratorium permits had landings from Gulf offshore waters in any year from 2007 to 2013. Thus, many of the lost permits may have been inactive permits. The highest number of terminated permits was in 2009, which was two years after initial issuance of the moratorium permits and is when those initial permits would have terminated if they were never renewed. This suggests those vessels were not actively fishing in offshore or federal waters.

Options 7b-e presume the number of permits at the end of one of the years during the moratorium, as selected by the Council, was the appropriate number of permits to maintain in the shrimp fishery. **Option 7b** (2009) represents an 11% decrease from the number of permits at the beginning of the moratorium, **Option 7c** (2011) represents an 18% decrease, **Option 7d** (2013) represents a 22% decrease, and **Option 7e** (2014) represents a 24% decrease. As mentioned above, these numbers include both active and inactive permits. During the time of the moratorium, the percentage of inactive permits in any one year has decreased (Table 2.3.2), probably because inactive permits were not renewed after expiration and were terminated. It should also be noted that of the 1,933 vessels issued permits at the beginning of the moratorium, 394 did not land any shrimp from offshore waters through 2013.

Table 2.3.2. Number of federally permitted active and inactive vessels in the offshore component of the Gulf shrimp fishery. Vessels are those that had a permit at any time during the year; because permits are transferable and thus more than one vessel can possess the same valid permit in a given year, the number of vessels with a valid permit in a year will be greater than the number of valid permits in that year, as demonstrated by the differences in permit and vessel counts in Table 1.1.1 and Table 2.3.1. The active vessels are those that were active at any point in the year.

Year	Total Permitted Vessels	Active Permitted Vessels	Inactive Permitted Vessels	Percent Inactive
2007	2,514	1,283	1,231	64%
2008	1,930	1,059	871	45%
2009	1,764	1,075	689	39%
2010	1,685	951	734	44%
2011	1,641	1,013	628	38%
2012	1,587	1,014	573	36%
2013	1,544	970	574	37%

Source: M. Travis, NMFS SERO, 2/29/16, Table 2.3

Option f presumes the number of permits at the end of the moratorium will be the appropriate number of permits to maintain in the shrimp fishery. This represents an unknown decrease from the number of permits at the beginning of the moratorium. The number of permits lost has decreased since 2009 and only 15 permits were terminated in 2015 (Table 1.1.1). If we assume a similar loss in 2016, the number of permits at the end of 2016 would be around 1,440, a decrease of 25% from the beginning of the moratorium.

Summary of Potential Impacts

Alternatives 2-6 would continue to allow a passive reduction in the number of permits over time. Fewer permits could result in a lower number of vessels actively fishing, decreasing bycatch and impacts on the environment. If fewer vessels could maintain the same level of total landings, each remaining vessel would have more landings and greater benefit. However, vessels cannot continue to increase CPUE indefinitely, and landings have been declining as effort has decreased in recent years. If the number of vessels is severely limited, shrimp harvest may not be able to support the shore-side infrastructure needed by the industry.

Alternative 7 would set the threshold number of Gulf shrimp permits above where they are expected to be when the measures in this amendment are implemented. Increasing the number of permits could allow an increase in effort in the future, and increased effort increases the risk of exceeding the target bycatch mortality of juvenile red snapper and protected species in shrimp trawls. If target levels are reached, more restrictive management measures could be required. Finally, only 1,539 vessels with moratorium permits had landings from Gulf offshore waters in any year between 2007 and 2013, indicating any permits beyond that number have not been used for shrimping during this time. Thus, although some buffer may be desired because some permits are temporarily inactive each year, any threshold higher than 1,539 permits (**Alternative 7, Options a-c**) would include permits that have not been active in the offshore fishery during the moratorium.

The expected effects of these alternatives are dependent on changes in fishing effort, which may or may not change based on the number of permits. Inactive permits during the moratorium years have provided an opportunity for increased effort, either by the owners of those vessels starting to fish or by transferring permits to new entrants that intend to fish. Yet effort has not increased because of economic and social factors (e.g., shrimp prices, fuel prices, vessel, and owner age). Reasons to maintain a permit that is not being used to harvest shrimp include waiting for fishing to be more economical, accounting for bycatch of shrimp when trawling for other purposes, or speculating that the value of the permit will increase in the future.

Action 4. Response When Threshold Number of Permits is Reached

Alternative 1. No action. No action will be triggered when the threshold number of valid or renewable permits is reached.

Alternative 2. If the number of valid or renewable permits reaches the threshold set in Action 3, any permits that are not renewed within one year of the expiration date on the permit will go into a Gulf Shrimp Vessel Permit Reserve Pool.

Alternative 3. If the number of valid or renewable permits reaches the threshold set in Action 3, the Council will form a review panel to review the threshold and determine if action is needed.

Shrimp AP recommended **Alternative 4.** When the number of valid or renewable permits reaches 1,300, the Council will form a review panel to review the details of a permit pool and other options. If the number of permits reaches the threshold set in Action 3, any permits that are not renewed within one year of the expiration date on the permit will go into a Gulf Shrimp Vessel Permit Reserve Pool. The panel would consist of Shrimp AP members, SSC members, and NMFS and Council staff. **AP Preferred**

Discussion: Action 3 would set a threshold number of permits that represents the smallest number of permits the Council currently believes can support the Gulf shrimp fishery. Because the permit reduction is passive (permits are only lost due to non-renewal by the permit holder), the threshold could be reached relatively quickly, after many years, or not at all. If the threshold is reached, the Council may want to respond with new management measures or re-evaluate the threshold.

No specific action would be triggered with **Alternative 1.** The Council could still choose to take an action relative to Gulf shrimp permits when the threshold is reached, but what type of action would be determined at that time. The Council could also choose to take action related to permits before the threshold is reached.

Alternative 2 would create a Gulf Shrimp Vessel Permit Reserve Pool (Reserve Pool). If the number of valid or renewable permits reaches the threshold set in Action 3, permits that normally would be terminated, revoked, or surrendered would instead be transformed into Reserved Gulf Shrimp Vessel Permits that could be re-issued. The NMFS Pacific Islands Regional Office maintains a similar pool for the American Samoa longline limited access permits, wherein if a permit is relinquished, revoked, or not renewed, the Regional Administrator makes that permit available for re-issuance. Action 5 addresses the issuance of Gulf shrimp permits from the Reserve Pool, if created.

When the Reserve Pool would be created depends on the threshold set in Action 3. In Action 3, Alternatives 2-6 would set a threshold number of permits below the current number of permits, which would delay the creation of the Reserve Pool until the threshold is reached. If Alternative 7 is chosen in Action 3, the threshold number of permits would be above the number expected to be valid or renewable when measures in this amendment would be implemented and would require NMFS to create new permits for the Reserve Pool. Any permit in the Reserve Pool

would not have a landings history associated with it, regardless of whether it was newly created or transformed from a regular permit; in other words, permits in the Reserve Pool would act as new permits without associated catch history.

With **Alternative 3**, if the threshold is reached, NMFS would notify the Council and then the Council would form and convene a review panel. The panel would consist of Statistical and Scientific Committee (SSC) members, Shrimp AP members, and NMFS and Council staff. The panel would determine if action was needed in response to permits reaching the threshold; that action could be to create a reserve permit pool, to reset the threshold, or establish any other management measure. Because the threshold might not be reached for many years, economic conditions, the health of the shrimp stocks, and other factors may have changed, and the threshold number of permits set in this amendment may no longer be appropriate for the fishery. Thus, **Alternative 3** allows the Council flexibility to tailor future management measures to the actual situation at that time, rather than analysis based on the current situation. If one of the options for Alternative 7 in Action 3 is chosen, **Alternative 3** in Action 4 would not be valid, as the target number of permits in those alternatives has already passed. In other words, the trigger for Council review would be immediate; because this amendment actually is a Council review, the decision made here would fulfill the terms in **Alternative 3** and no additional action beyond this amendment would be warranted.

At their meeting in March 2016, the Shrimp AP recommended the Council add another alternative that combined the ideas of **Alternatives 2** and **3**. This alternative would have the Council form and convene a review panel *before* the threshold from Action 3 was reached, to review the threshold and details of the Reserve Pool or other management measures. The Shrimp AP continued to support the idea of the Reserve Pool for permits, but believed a review of the threshold should be conducted before implementation of the pool is triggered.

The Shrimp AP suggested the review panel should meet if only 1,300 valid and renewable permits remain, which is approximately 150 permits lower than at the end of 2015. If the rate of permit terminations continues at the rate seen in 2013 and 2014 (approximately 30 permits terminated per year), the review panel would not meet for another 5 years. In 2015, only 15 permits were terminated, so the time to the review panel could be even longer.

Action 5. Issuance of Reserved Gulf Shrimp Vessel Permits

NOTE: This action only considers eligibility requirements for Reserved Gulf Shrimp Vessel Permits, if established in Action 4. It does not affect federal Gulf shrimp moratorium permits.

Alternative 1. No action. Individuals must submit a completed application to NMFS to be issued a Reserved Gulf Shrimp Vessel Permit. Applicants with complete applications will receive a Gulf Shrimp Vessel Permit Reserve Pool permit if one is available.

Alternative 2. NMFS will maintain a waiting list for Reserved Gulf Shrimp Vessel Permits and notify individuals in the order in which they appear on the list when a Reserved Gulf Shrimp Vessel Permit becomes available. Once notified, the individual must submit a completed and up-to-date application to NMFS to be issued a Reserved Gulf Shrimp Vessel Permit. To be eligible for a Reserved Gulf Shrimp Vessel Permit the applicant must meet the requirements selected below. A Reserved Gulf Shrimp Vessel Permit may only be transferred to an individual who also meets the eligibility requirement. **AP Preferred**

Option a – no eligibility requirements

Option b – be a U.S. citizen or business

IPT recommends removing Option b due to legal issues

Option c – assign the permit to a vessel that is of at least **X** length on the application

Option d – assign the permit to a vessel with a United States Coast Guard (USCG) Certificate of Documentation on the application (five net ton minimum)

Shrimp AP recommended change to Option d - assign the permit to a vessel with a United States Coast Guard (USCG) safety inspection for fishing activity beyond 3 miles
IPT recommended wording: Option d – assign the permit to a vessel with a United States Coast Guard (USCG) Dockside Safety Exam for fishing activity beyond 3 miles

Shrimp AP recommended Option e – the permit holder must show proof of shrimp landings through trip tickets or other applicable landings data programs within 12 months of the issuance of the permit

IPT recommended wording: Option e – after receiving a Reserved Gulf Shrimp Vessel Permit, the permit holder must show proof of shrimp landings associated with the vessel through trip tickets or other applicable landings data programs within 12 months of the issuance of the permit or the permit will not be renewed

Note: For any of the options, the Council should discuss the type of proof required for meeting eligibility requirements.

Alternative 3. The Reserved Gulf Shrimp Vessel Permits will be available from NMFS *once per year* and will be issued to applicants in the order in which applications are received after the availability of permits is announced. Individuals must submit a completed application to NMFS to be eligible for a Reserved Gulf Shrimp Vessel Permit. To be eligible for a Reserved Gulf Shrimp Vessel Permit the applicant must meet the requirements selected below. A Reserved

Gulf Shrimp Vessel Permit may only be transferred to an individual who also meets the eligibility requirement.

Option a – no eligibility requirements

Option b – be a U.S. citizen or business

Option c – assign the permit to a vessel that is of at least **X** length on the application

Option d – assign the permit to a vessel with a USCG Certificate of Documentation on the application (five net ton minimum)

IPT recommends any changes to Alternative 2 options be made here as well

Alternative 4. The Reserved Gulf Shrimp Vessel Permits will be available from NMFS *once per year*. If the number of applicants is greater than the number of Reserved Gulf Shrimp Vessel Permit, NMFS will conduct a lottery to determine which individuals may be issued the available permits. Individuals must submit a completed application to NMFS by the published deadline to be eligible for the lottery. To be eligible for a Reserved Gulf Shrimp Vessel Permit, the applicant must meet the requirements selected below. A Reserved Gulf Shrimp Vessel Permit may only be transferred to an individual who also meets the eligibility requirement.

Option a – no eligibility requirements

Option b - be a U.S. citizen or business

Option c - assign the permit to a vessel that is of at least **X** length on the application

Option d - assign the permit to a vessel with a USCG Certificate of Documentation on the application (five net ton minimum)

IPT recommends any changes to Alternative 2 options be made here as well

Note: All current permit renewal/transferability and recordkeeping/reporting requirements would remain in place regardless of the alternative chosen. These requirements can be found in detail in 50 CFR 622.4 and 622.51.

Discussion: If a Reserve Pool for Gulf shrimp permits is created through Action 4, distribution of those permits should also be considered. Distribution could follow the regular permit application process with no additional restrictions with **Alternative 1**. A Reserved Gulf Shrimp Vessel Permit would be obtained by submitting a completed application and the appropriate application fee (currently \$25 for the first permit, \$10 for each additional permit on the application). If a Reserved Gulf Shrimp Vessel Permit is available, it would be assigned to the applicant. However, if a permit is not available, the application fee would be forfeited. To avoid submitting an application when no permits are available, the applicant would need to have some knowledge of permits that may have an upcoming termination date or of someone willing to surrender their permit. Reserved Gulf Shrimp Vessel Permits would be fully transferable.

With **Alternative 2**, NMFS would create a waiting list for Reserved Gulf Shrimp Vessel Permits, which would be posted on the SERO website. Each person wishing to be on the waiting list would submit his/her name and contact information and be responsible for updating the information if it changes, not doing so would result in forfeiting his/her place on the list. If a Reserved Gulf Shrimp Vessel Permit becomes available, the first individual on the list would be contacted. If that individual does not submit a completed application and fee within the specified time or has inaccurate contact information, the next person on the list would be contacted. If any of **Options b-d** are selected, NMFS would only accept applications from individuals that meet

the requirements. Reserved Gulf Shrimp Vessel Permits would only be transferrable to someone who meets the same eligibility requirements.

With **Alternative 3**, NMFS would hold all Reserved Gulf Shrimp Vessel Permits in the Reserve Pool until a specific date, when a notice would be published in the *Federal Register* announcing the availability of those permits. NMFS would also distribute a Southeast Fisheries Bulletin. After the announcement, the permits would be distributed to entities submitting a completed application and the appropriate fee on a first come, first served basis, until no permits were left in the Reserve Pool. No applications would be accepted before the announcement of availability. If any of **Options b-d** are selected, NMFS would only accept applications from individuals who met the eligibility requirements. Reserved Gulf Shrimp Vessel Permits would only be transferrable to someone who meets the same eligibility requirements.

Alternative 4 is similar to **Alternative 3** in that NMFS would hold all Reserved Gulf Shrimp Vessel Permits in the Reserve Pool until a specific date, when a notice would be published in the *Federal Register* announcing an application period for those permits. NMFS would also distribute a Southeast Fisheries Bulletin announcing the application period. Applications would be held until the end of the announced application period before being issued. If NMFS received more completed applications and fees than the number of available Reserved Gulf Shrimp Vessel Permits, a lottery would be conducted to determine which qualified applicants would receive a permit. No applications would be accepted before or after the availability period. If any of **Options b-d** are selected, NMFS would only accept applications from individuals who met the eligibility requirements. Reserved Gulf Shrimp Vessel Permits would only be transferrable to someone who meets the same eligibility requirements.

Option a would not add any eligibility requirements to be issued a Reserved Gulf Shrimp Vessel Permit. **Option b** was suggested by the Shrimp AP. However, the Council cannot exclude permanent resident aliens, and they would need to articulate a good reason for wanting to limit to citizens and resident aliens in light of the fact that no other vessel permits have such a restriction.

The Shrimp AP was concerned that if Reserved Gulf Shrimp Vessel Permits were available to anyone for \$25 from NMFS, some people might buy all available permits to control the cost of permits on the market. A permit must be attached to a vessel, but the vessel can be of any size, such as a canoe, if the vessel is state or USCG registered. To help ensure Reserved Gulf Shrimp Vessel Permits are only issued to entities intending to use them for shrimping, the Shrimp AP suggested eligibility requirements be established, such as a minimum vessel size (**Options c and d**). Establishing this type of restriction would set a new precedent for Gulf fisheries.

The Shrimp AP considered various minimum vessel lengths, but deferred making a recommendation. Two methods of classifying vessels by length are presented in Table 2.5.1. Method 1 is based on a longstanding distinction between large and small vessels in historical economic analyses as a proxy between vessels used to harvest shrimp in offshore versus inshore waters. Method 2 separates vessels into four classes by 25-foot lengths to allow a finer distinction. **The Council should choose which method and size threshold to use for Option c.** A more detailed break out of active vessels by size can be found in Appendix X.

Table 2.5.1. Proportion of vessels with valid or renewable Gulf shrimp permits in each size class (as of January 6, 2015). Methods are explained in the text.

		Method 1			
Vessel Length		< 60 ft		≥ 60 ft	
Proportion of Vessels		24.3%		75.7%	
		Method 2			
Vessel Length		<25 ft	25 - <50 ft	50 - <75 ft	≥75 ft
Proportion of Vessels		2.8%	13.6%	42.8%	40.8%

Source: NMFS SERO permits database.

The Shrimp AP also discussed USCG regulations which require certification of five net tons or larger. Vessel documentation (**Option d**) is a national form of vessel registration issued by the USCG. Vessels of less than five net tons are excluded from such documentation, but may still obtain it. However, certified vessels may not be actively engaged in commercial fishing or may be owned by foreign entities, so the Council could use this option in conjunction with another option. Currently, federally permitted vessels can be registered with either the USCG or a state, and owners of state-registered vessels are not required to submit the tonnage of their vessel; therefore, the number of current federally permitted vessels below five net tons cannot be determined.

Action 6. Transit Provisions for Shrimp Vessels without a Federal Permit

Alternative 1. No Action. For a person aboard a vessel to fish for shrimp or possess shrimp in Gulf federal waters, a federal vessel permit for Gulf shrimp must have been issued to the vessel and must be on board.

Alternative 2. A vessel possessing shrimp may transit Gulf federal waters without a federal vessel permit if fishing gear is appropriately stowed. Transit means non-stop progression through the area; fishing gear appropriately stowed means trawl doors and nets must be out of the water. **AP Preferred**

Alternative 3. A vessel possessing shrimp may transit Gulf federal waters without a federal vessel permit if fishing gear is appropriately stowed. Transit means non-stop progression through the area; fishing gear appropriately stowed means a trawl net may remain on deck, but trawl doors (if present) must be disconnected from the trawl gear and must be secured.

Alternative 4. A vessel possessing shrimp may transit Gulf federal waters without a federal vessel permit if fishing gear is appropriately stowed. Transit means non-stop progression through the area; fishing gear appropriately stowed means a trawl net may remain on deck, but the bag straps must be removed from the net and must be secured.

Discussion: At its August, 2015 Council meeting it was brought to the Council's attention that there are some areas where state licensed shrimpers need to transit from state waters through federal waters in order to return to state waters and their port. However, because these state licensed shrimping vessels do not possess a federal permit, they cannot legally transit through federal waters. Because of this, the Council asked staff to investigate a provision for state-licensed shrimping vessels to transit through federal waters as long as these vessels weren't actively fishing.

Alternative 1 would continue to prohibit transit through federal waters without a federal permit for vessels possessing shrimp. Vessels that are state-licensed must have a federal permit or travel extra distances to remain in state waters to return to port. Thus, shrimpers must spend money to buy a federal permit even though they do not fish in federal waters or face increased time at sea and fuel costs due to a longer transit.

In this amendment the alternatives have two different definitions of stowed gear. **Alternative 2** is based on a recent regulation decision for South Atlantic rock shrimp and would allow transit through federal waters of non-federally permitted vessels as long as shrimp nets are out of the water. The South Atlantic Fishery Management Council (South Atlantic Council) currently has transit provisions in its Shrimp FMP for vessels in possession of penaeid shrimp in closed areas. The regulations state that transit of the closed EEZ with less than 4 in stretch mesh aboard while in possession of penaeid species will be allowed provided that the nets are in an unfishable condition, which is defined as stowed below deck (SAFMC 1993). Recently, the South Atlantic Council established a different transit provision in the Coral FMP for rock shrimp vessels in habitat areas of particular concern. These regulations define gear stowed as doors and nets out of

water and either onboard the deck or below the deck of the vessel. However, at their September 2015 meeting, the South Atlantic Council reviewed concerns about bringing gear on board rock shrimp vessels while at sea for safety reasons. The transit for rock shrimp is a very short distance through a closed area and rock shrimp vessels have vessel monitoring systems (VMS), so the South Atlantic Council approved changing the wording of the regulation to the more general “doors and nets out of water” as in **Alternative 2**. The South Atlantic Council expressly stated that this was an exception to the penaeid transit provisions applicable only for rock shrimp vessels under these circumstances.

Alternative 3 is based on the current Gulf regulations and requires more, with the trawl doors needing to be on deck and secured. Regulations for closed areas to protect Gulf reef fish allow a trawl net to remain on deck, but the trawl doors must be disconnected from the trawl gear and must be secured. This alternative is easier to enforce because if gear is secured, it is not fishable.

CHAPTER 3. REFERENCES

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