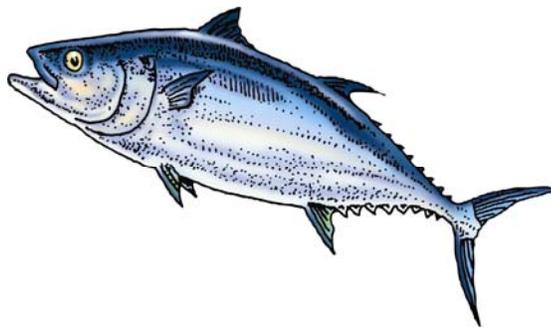


*Draft Environmental Assessment,
Regulatory Impact Review,
and
Initial Regulatory Flexibility Analysis*

for a Rule to Adjust the

**Atlantic Bluefin Tuna
General and Harpoon Category Regulations**



United States Department of Commerce
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Office of Sustainable Fisheries
Highly Migratory Species Management Division
August 2009

ABSTRACT

Proposed Action: Adjust the Atlantic bluefin tuna (BFT) General category and Harpoon category regulations to increase daily retention limits and allow the full January General category subquota to be reached.

Type of statement: Draft Environmental Assessment (EA), Regulatory Impact Review (RIR), and Initial Regulatory Flexibility Analysis (IRFA)

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Abstract: The proposed action would adjust regulations governing the U.S. BFT fishery to enable more thorough utilization of the available U.S. quota, while ending BFT overfishing, rebuilding the BFT stock by 2019, and minimizing bycatch and bycatch mortality to the extent practicable. The U.S. BFT quota is derived from the recommendations of the International Commission for the Conservation of Atlantic Tunas (ICCAT) and implemented under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) and the Atlantic Tunas Convention Act (ATCA). For the past several years, the U.S. Atlantic BFT fishery has not fully harvested the available quota, particularly the BFT commercial subquotas. These measures would be consistent with the 2006 Consolidated Atlantic Highly Migratory Species Fishery Management Plan (Consolidated HMS FMP), including the BFT rebuilding program.

This proposed action follows consideration of public comment collected via an Advance Notice of Proposed Rulemaking on several issues regarding Atlantic highly migratory species fisheries, and contains measures raised during the 2009 BFT quota specifications rulemaking and at recent meetings of the HMS Advisory Panel.

DRAFT FINDING OF NO SIGNIFICANT IMPACT

Draft Finding of No Significant Impact
for a regulatory amendment to adjust the Atlantic bluefin tuna (BFT)
General and Harpoon category regulations.

National Marine Fisheries Service

The Highly Migratory Species (HMS) Management Division of the Office of Sustainable Fisheries submits this Environmental Assessment (EA) for Secretarial review under the procedures of the Magnuson-Stevens Fishery Conservation and Management Act. The alternatives preferred for implementation in the proposed rule would: (1) Increase the Atlantic bluefin tuna (BFT) General category maximum daily retention limit from three to five BFT measuring 73 inches or greater; (2) allow the full January General category subquota to be reached (i.e., allow the fishery to continue past January 31 if necessary), and (3) increase the Harpoon category daily incidental retention limit of large medium BFT (measuring 73 to less than 81 inches) from two fish to four fish. The purpose of this action is to enable more thorough utilization of the available U.S. quota, while ending BFT overfishing, rebuilding the BFT stock by 2019, and minimizing bycatch and bycatch mortality to the extent practicable. This EA was developed as an integrated document that includes a Regulatory Impact Review (RIR) and Initial Regulatory Flexibility Analysis (IRFA). Copies of the proposed rule and the EA/RIR/IRFA are available from NMFS at the following addresses:

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Highly Migratory Species Management Division, F/SF1
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or

<http://www.nmfs.noaa.gov/sfa/hms/>

The EA considers information contained in the Final Environmental Impact Statement (FEIS) associated with the Final Consolidated HMS Fishery Management Plan (Consolidated HMS FMP) and the 2009 Fishing Year Atlantic Bluefin Tuna Quota Specifications and Effort Controls EA, particularly with regard to the impacts of domestic quotas and subquotas implemented under the ICCAT BFT Rebuilding Program and of handgear (i.e., rod and reel, handline, harpoon, and bandit gear) on the BFT fishery, non-target and protected species, and the physical and human environment. All of that information is herein incorporated by reference, and the EA is consistent with the analyses and conclusions contained in those documents.

National Oceanic and Atmospheric Administration Administrative Order 216-6 (NAO

216-6) (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. In addition, the Council on Environmental Quality regulations at 40 C.F.R. 1508.27 state that the significance of an action should be analyzed both in terms of “context” and “intensity.” Each criterion listed below is relevant in making a finding of no significant impact and has been considered individually, as well as in combination with the others. The findings below are supported by this EA and other analyses described below. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQ’s context and intensity criteria. These include:

1) Can the proposed action reasonably be expected to jeopardize the sustainability of any target species that may be affected by the action?

The action is not expected to jeopardize the sustainability of BFT, which is the primary target species of fishing operations affected by this action. Fishing patterns and behavior are not expected to change significantly as a result of this action.

In order to enable more thorough utilization of the available U.S. quota, which was established consistent with the western BFT rebuilding program developed by the International Commission for the Conservation of Atlantic Tunas (ICCAT), NMFS would increase the maximum daily retention limits for the General category, allow the full January General category subquota to be reached (i.e., the General category would not automatically close on January 31), and increase the daily incidental limit for the Harpoon category. However, these three effort controlling actions would affect only when and where BFT mortality occurs, and not the magnitude.

The magnitude of mortality has been defined by finite quotas and fish size limits established under a 20-year rebuilding program for BFT (analyzed in the Environmental Impact Statement for the 1999 FMP for Atlantic Tunas, Swordfish, and Sharks), and other recommendations by ICCAT. The 2008 ICCAT recommendation was made after consideration of scientific and statistical information, including the 2008 BFT stock assessment. The projected BFT rebuilding program is based on total allowable catch (in weight) and assumes that the pattern of fishing mortality (e.g., fish caught at each age) will not be changed dramatically. As long as the U.S. quota is not exceeded and there is no significant change in the selectivity of the fisheries, the proposed actions would not be expected to impact the rebuilding program.

Other than prohibiting directed fishing in the Gulf of Mexico, time period subquotas are used in the General category to regulate effort, which helps achieve optimum yield by considering the social and economic interests of the participants, but are not needed or used for biological reasons. The limited nature of these actions is therefore unlikely to have any differential impacts on the life history or overall biological distribution of the western Atlantic BFT stock. Generally, it is possible that if too many effort controls are implemented, effort may shift to other species or the pace of the fishery could be slowed. Alternatively, if not enough effort controls are implemented, category quotas could be reached rapidly and these fisheries would close prematurely. Fishermen may then turn to other stocks to target, particularly other

HMS species, with corresponding impacts to other elements of the ecosystem. Neither of these scenarios is expected to result from action, because the proposed changes are moderate in nature and can be adjusted during the BFT season by inseason action, which fall within the scope of the Consolidated HMS FMP EIS, to avoid jeopardizing the sustainability of the BFT resource.

2) Can the proposed action reasonably be expected to jeopardize the sustainability of any non-target species?

The action is not expected to jeopardize the sustainability of any non-target fish species. Primary non-target fish species caught by vessels targeting BFT include yellowfin tuna, bigeye tuna, and other large pelagic species. Impacts of handgear used to fish for Atlantic tunas under the Atlantic Tunas General category and Harpoon categories are described in full in the Consolidated HMS FMP (NMFS 2006). The primary fishing gears used to target BFT in the General category (i.e., rod and reel and handline) allow for the live release of non-target species to a great degree. Harpoon gear (the only gear used on Harpoon category permitted vessels and a gear used by a small proportion of General category vessels) is selective gear that is used to capture only one large pelagic fish (primarily BFT but also swordfish) at a time. Bycatch and bycatch mortality of commercial handgear is considered to be low, particularly for harpoons, which are thrown individually at a fish, determined by the fisherman to be greater than the minimum commercial size.

Handgear fisheries actions, covered under the June 2001 Biological Opinion (BiOp) for HMS fisheries, were determined not likely to jeopardize the continued existence of endangered or threatened species, including sea turtles. The BiOp indicated that turtles have been known to be captured in rod-and-reel fisheries at relatively low rates and that since potential for take in other HMS fisheries is low, NMFS anticipates that continued operation of additional HMS fisheries (*i.e.*, tuna purse seine, harpoon/hand gear fisheries, hook-and-line, *etc.*) will result in documented takes of no more than three sea turtles, of any species, in combination, per calendar year. NMFS does not consider such level of interaction to jeopardize the sustainability of sea turtles.

NMFS has already implemented rebuilding plans, as appropriate, and fishing controls for non-target species. Goals of the Consolidated HMS FMP include implementing rebuilding plans, minimizing bycatch and bycatch mortality for overfished stocks, and managing healthy stocks for optimum yield. Bycatch reduction measures are in place under the HMS Bycatch Reduction Implementation Plan (discussed in Section 3.8 of the Consolidated HMS FMP). Section 3.9.9.1 of the Consolidated HMS FMP lists the 22 marine mammal species that are or could be of concern with respect to potential interactions with HMS fisheries. Section 3.9.9.2 discusses interactions and the Endangered Species Act (ESA), including six endangered whale species. The response to Question 5, below, summarizes the finding that marine mammals and ESA-listed species' sustainability would not be jeopardized by the action.

Although, this action would increase opportunities to harvest established fishing quotas, it is not expected to significantly alter fishing patterns and/or behavior, and therefore should not have adverse impacts on non-target species beyond those considered in the 2001 BiOp (regarding turtle mortality) and in the Consolidated HMS FMP. In the last few years, commercial effort and landings have greatly declined because of decreased availability of BFT and other factors.

3) Can the proposed action reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat (EFH) as defined under the Magnuson-Stevens Act and identified in FMPs?

This action is not expected to change BFT fishing patterns or impacts on EFH significantly, or to allow substantial damage to ocean and coastal habitats and/or EFH. The primary fishing gears used in the General and Harpoon categories (hook and line and harpoon) are pelagic in nature and have little impact on coastal resources or bottom substrate. Water column features also are identified as EFH. In the Consolidated HMS FMP FEIS Record of Decision, NMFS concluded that there is no evidence that physical effects caused by fishing for HMS are adversely affecting EFH to the extent that detrimental effects can be identified on the habitat of fisheries. That analysis is incorporated by reference for the purposes of the EA. Because this action would not significantly alter fishing gears or practices, it is anticipated that it would not have any adverse impacts to EFH, and the conclusion for the Consolidated HMS FMP is still applicable, so further consultation is not necessary.

4) Can the proposed action be reasonably expected to have a substantial adverse impact on public health or safety?

No. The action would not require fishermen to fish in an unsafe manner. The action would provide the potential for handgear fishermen to retain a small amount of additional fish per day. Fishing practices (i.e., how fishermen deploy their handgear) or behavior would not change significantly, although the amount of fishing effort may increase slightly as a result of this action. The action also has the potential to make fishing trips more efficient (i.e., allow vessels to attain a given level of landings in a fewer number of trips). Because the proposed action would not change the current fishery practices, no significant effects to public health and safety are anticipated from the proposed action.

5) Can the proposed action reasonably be expected to adversely affect endangered or threatened species, marine mammals, or critical habitat of these species?

As summarized in Question 2, the 2001 BiOp concluded that handgear fisheries actions, were not likely to jeopardize the continued existence of endangered or threatened species, including sea turtles (and would be expected to result in documented takes of no more than three sea turtles, of any species, in combination, per calendar year). There has been no reason since 2001 for NMFS to reinstate consultation on Atlantic HMS handgear fisheries. The data and assumptions considered in the 2001 BiOp remain valid.

Relative to the status quo, a slight increase in overall effort is likely. However, relative to the effort level at the time of the 2001 consultation, fishery participation is lower due to the recent pattern of reduced availability of commercial sized BFT to the fishery. Generally, increases in effort have the potential to increase interactions and have adverse impacts on non-target species. However, the measures in this proposed action are not expected to significantly alter current fishing practices or bycatch mortality rates, and therefore should not have adverse impacts on protected species, or have any further impacts on endangered species, marine mammals, or critical habitat beyond those considered in the 2001 BiOp and analyzed in the Consolidated HMS FMP.

6) Can the proposed action be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships)?

The action is not expected to have a substantial impact on biodiversity and ecosystem function because HMS fishing effort is not expected to change significantly from current levels of fishing effort, which are not substantially impacting biodiversity and ecosystem function. This action is intended to allow more thorough utilization of the existing General and Harpoon category quotas, which were established under the BFT ICCAT-recommended rebuilding program, which considers the latest stock assessment information.

7) Are significant social or economic impacts interrelated with natural or physical environmental effects?

No. There are no significant natural or physical environmental effects associated with the proposed action and there are no significant social or economic impacts interrelated with natural or physical environmental effects. The proposed action is expected to have some short-term positive socioeconomic impacts for vessel owners and operators due to the increase in fishing opportunities relative to the status quo (i.e., via the potential to retain and sell additional fish per day) although actual impacts are not likely to be significant and will depend on BFT availability to the fishing gears. In the long-term (i.e., over the course of years), positive social and economic impacts can be expected as the fishery rebuilds. See Section 6 of the EA for an analysis of the predicted economic impacts to the BFT fishery and small business entities.

8) Are the effects on the quality of the human environment likely to be highly controversial?

No. The action is expected to increase opportunities for vessels to reach the established General and Harpoon category quotas. It affect only when and where BFT mortality occurs, and not the magnitude of mortality, which is defined by the finite U.S. BFT quota and subquotas and other regulations, such as minimum fish size. The regulations regarding the General category January subquota and the General and Harpoon category daily retention limit have been in place for several years, and NMFS does not consider the changes in this action to represent a substantial change from the existing regulations.

9) Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas?

No. The action area does not include the unique areas listed. Thus, the proposed action will not result in substantial impacts to the listed areas.

10) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

No. The actions considered here modify existing daily retention limit and season regulations established in the Consolidated HMS FMP and/or implemented in recent years and allow for a modest increase in fishing opportunities. The effects of the action are not likely to be highly uncertain or involve unique or unknown risks because the effects of BFT fisheries affected by this action are well known and have been monitored for years. Regulations have been established to control harvest levels and collect landings information which aids in monitoring.

11) Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?

The action would provide for increased fishing opportunities within the existing U.S. BFT quota, and specifically the General and Harpoon category subquotas, which NMFS establishes annually consistent the 1998 ICCAT BFT rebuilding program and the Consolidated HMS FMP. Other recent actions have been consistent with this rebuilding program. Regulations such as retention limits, size limits, closed areas for some gears, and others remain in effect to achieve overall fishery management goals. Any future domestic actions taken in regard to the BFT fishery would remain within the scope of ICCAT recommendations and the Magnuson-Stevens Act. Likewise, this action is consistent with previous Biological Opinions issued under the ESA. No cumulatively significant impacts are expected as a result of this and past actions.

12) Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources?

No. The action would not adversely affect these sites or resources because there are no districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places within the affected areas, and the preferred alternative would not cause the loss or destruction of significant scientific, cultural, or historical resources because there are none within the affected areas.

13) Can the proposed action reasonably be expected to result in the introduction or spread of a non-indigenous species?

As the action does not involve ballast water exchange or movement of vessels between water bodies, it is not expected to result in the introduction or spread of any non-indigenous species.

14) Is the proposed action likely to establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration?

No. This proposed action does not obligate the agency to take similar or related actions in the future or otherwise influence or preclude future decisions. The proposed action is intended to enable more thorough utilization of the available U.S. quota, and specifically the recently underharvested General and Harpoon category subquotas, while ending BFT overfishing, rebuilding the BFT stock by 2019, and minimizing bycatch and bycatch mortality to the extent practicable.

15) Can the proposed action reasonably be expected to threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment?

No. NMFS has preliminarily determined that the proposed action would be implemented in a manner consistent, to the maximum extent practicable, with the enforceable policies of Atlantic Ocean coastal states (including the Gulf of Mexico and Caribbean) that have approved coastal zone management programs. Letters will be sent to the relevant states asking for their concurrence when the proposed rule is filed with the Federal Register. NMFS has also preliminarily determined that the action is consistent with the Marine Mammal Protection Act and the ESA.

16) Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

The action is not expected to result in cumulative adverse effects that could have a substantial effect on target species or non-target species. This action would allow for a limited increase in fishing opportunities within the existing General and Harpoon category subquotas and other regulations. Thus, it would be consistent with ongoing implementation of ICCAT's rebuilding program for western Atlantic BFT and the objectives of the Consolidated HMS FMP as analyzed in the HMS FMP FEIS. The 2008 ICCAT recommendation was made after consideration of scientific and statistical information, including the 2008 BFT stock assessment, to guide cumulative future management actions of member countries. A slight increase in fishing effort may occur relative to recent fishing years, but changes in current fishing practices are not anticipated.

As discussed in the responses to questions 1, 2, 5, 11, and others, the proposed action would not be expected to result in cumulative adverse effects that could have a substantial effect on target or non-target species. Handgear such as rod and reel, handline, and harpoon are efficient gears with low bycatch rates and have been used for years in Atlantic tuna fisheries.

Fishermen would continue to be bound by subquotas and regulations such as size limits.

DETERMINATION

In view of the information presented in this document and the analysis contained in the supporting Environmental Assessment (EA) prepared for a Rule to Adjust the Atlantic Bluefin Tuna General and Harpoon Category Regulations (and in the FEIS for the Consolidated HMS FMP), it is hereby determined that the implementation of this action in accordance with the preferred alternatives (A2, B2, and C2) identified in the supporting EA will not significantly impact the quality of the human environment, as described above and in the supporting EA. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an EIS for this action is not necessary.

DRAFT _____
Alan D. Risenhoover _____ Date
Director, Office of Sustainable Fisheries

TABLE OF CONTENTS

ABSTRACT		I
DRAFT FINDING OF NO SIGNIFICANT IMPACT		II
1.0	PURPOSE AND NEED FOR ACTION	14
1.1	MANAGEMENT HISTORY	14
1.2	NEED FOR ACTION AND OBJECTIVES	16
2.0	SUMMARY OF THE ALTERNATIVES	18
2.1	ISSUE 1: GENERAL CATEGORY MAXIMUM DAILY RETENTION LIMIT	18
2.2	ISSUE 2: GENERAL CATEGORY SEASON	20
2.3	ISSUE 3: HARPOON CATEGORY DAILY INCIDENTAL RETENTION LIMIT	21
3.0	DESCRIPTION OF AFFECTED ENVIRONMENT	23
3.1	STATUS OF THE STOCKS	23
3.2	FISHERY PARTICIPANTS, GEAR TYPES, AND AFFECTED AREA	24
3.3	HABITAT	26
3.4	PROTECTED SPECIES UNDER THE ENDANGERED SPECIES ACT (ESA) AND MARINE MAMMAL PROTECTION ACT (MMPA)	27
4.0	ENVIRONMENTAL CONSEQUENCES OF ANALYZED ALTERNATIVES	29
4.1	ISSUE 1: GENERAL CATEGORY MAXIMUM DAILY RETENTION LIMIT	29
4.2	ISSUE 2: GENERAL CATEGORY SEASON	32
4.3	ISSUE 3: HARPOON CATEGORY DAILY INCIDENTAL RETENTION LIMIT	35
4.4	IMPACTS ON ESSENTIAL FISH HABITAT	38
4.5	IMPACTS ON PROTECTED SPECIES	38
4.6	ENVIRONMENTAL JUSTICE CONCERNS	39
4.7	COASTAL ZONE MANAGEMENT ACT (CZMA) CONCERNS	39
4.8	COMPARISON OF ALTERNATIVES	39
4.9	CUMULATIVE IMPACTS	39
5.0	MITIGATION AND UNAVOIDABLE ADVERSE IMPACT	41
5.1	MITIGATING MEASURES	41
5.2	UNAVOIDABLE ADVERSE IMPACTS	41
5.3	IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES	41
6.0	ECONOMIC EVALUATION	42
6.1	PRICES AND MARKETS	42
6.2	EX-VESSEL GROSS REVENUES	42
6.3	ANGLING AND CHARTER BOAT REVENUES	44
6.4	BLUEFIN TUNA FISHERY PARTICIPATION	45
6.5	BLUEFIN TUNA PROCESSING AND EXPORT	45
6.6	EXPECTED ECONOMIC IMPACTS OF THE ALTERNATIVES	46
7.0	REGULATORY IMPACT REVIEW	48
7.1	DESCRIPTION OF THE MANAGEMENT OBJECTIVES	48
7.2	DESCRIPTION OF THE FISHERY	48
7.3	STATEMENT OF THE PROBLEM	49
7.4	DESCRIPTION OF EACH ALTERNATIVE	49
7.5	ECONOMIC ANALYSIS OF EXPECTED EFFECTS OF EACH ALTERNATIVE RELATIVE TO THE BASELINE	49
7.6	CONCLUSION	49

8.0	INITIAL REGULATORY FLEXIBILITY ANALYSIS	50
8.1	DESCRIPTION OF THE REASONS WHY ACTION IS BEING CONSIDERED	50
8.2	STATEMENT OF THE OBJECTIVES OF, AND LEGAL BASIS FOR, THE PROPOSED RULE.....	50
8.3	DESCRIPTION AND ESTIMATE OF THE NUMBER OF SMALL ENTITIES TO WHICH THE PROPOSED RULE WILL APPLY 50	
8.4	DESCRIPTION OF THE PROJECTED REPORTING, RECORD-KEEPING, AND OTHER COMPLIANCE REQUIREMENTS OF THE PROPOSED RULE, INCLUDING AN ESTIMATE OF THE CLASSES OF SMALL ENTITIES WHICH WILL BE SUBJECT TO THE REQUIREMENTS OF THE REPORT OR RECORD	50
8.5	IDENTIFICATION OF ALL RELEVANT FEDERAL RULES WHICH MAY DUPLICATE, OVERLAP, OR CONFLICT WITH THE PROPOSED RULE.....	50
8.6	DESCRIPTION OF ANY SIGNIFICANT ALTERNATIVES TO THE PROPOSED RULE THAT ACCOMPLISH THE STATED OBJECTIVES OF APPLICABLE STATUTES AND THAT MINIMIZE ANY SIGNIFICANT ECONOMIC IMPACT OF THE PROPOSED RULE ON SMALL ENTITIES	51
9.0	COMMUNITY PROFILES	54
10.0	OTHER CONSIDERATIONS	55
10.1	MAGNUSON-STEVENS ACT.....	55
10.2	PAPERWORK REDUCTION ACT.....	55
10.3	E. O. 13132	55
11.0	LIST OF PREPARERS	56
12.0	LIST OF AGENCIES AND PERSONS CONSULTED	57
13.0	REFERENCES	58
14.0	TABLES AND FIGURES	59
	TABLE 1. ATLANTIC BLUEFIN TUNA FINAL QUOTA SPECIFICATIONS (IN METRIC TONS) FOR THE 2009 FISHING YEAR (JANUARY 1-DECEMBER 31, 2009)	60
	TABLE 2. ATLANTIC BLUEFIN TUNA ADJUSTED QUOTAS AND LANDINGS (METRIC TONS) BY CATEGORY FOR THE 2008 FISHING YEAR (JANUARY 1- DECEMBER 31, 2008) AS OF JANUARY 13, 2009.	61
	TABLE 3: COMPARISON OF IMPACTS OF ALTERNATIVES	62
	TABLE 4: 2007/2008 ATLANTIC HMS AND ATLANTIC TUNAS PERMITS AS OF DECEMBER 31, 2008.	64
	TABLE 5: BFT LANDINGS (METRIC TONS) BY YEAR AND CATEGORY, 1996 TO 2008 (2008 FISHING YEAR LANDINGS AS OF JANUARY 13, 2009).	65
	TABLE 6. SUMMARY OF PATTERNS OF FISHING ACTIVITIES DIRECTED AT BFT IN THE UNITED STATES	66
	TABLE 7: EX-VESSEL AVERAGE PRICE (PER LB, ROUND WEIGHT) FOR BFT BY COMMERCIAL FISHING CATEGORY, 1996-2008 (2008 FISHING YEAR DATA AS OF JANUARY 13, 2009).	67
	TABLE 8: ALTERNATIVE B1: GROSS REVENUES ASSOCIATED WITH THE GENERAL CATEGORY SEASON NO ACTION ALTERNATIVE.	68
	TABLE 9: EX-VESSEL GROSS REVENUES IN THE U.S. ATLANTIC BLUEFIN TUNA FISHERY BY COMMERCIAL FISHING CATEGORY, 1996-2008 (2008 FISHING YEAR DATA AS OF JANUARY 13, 2009)	69
	TABLE 10: SUMMARY OF EXPECTED NET ECONOMIC BENEFITS AND COSTS OF ALTERNATIVES.	70
	TABLE 11: AVERAGE MONTHLY PRICES (PER LB, ROUND WEIGHT) FOR ATLANTIC BLUEFIN TUNA IN THE GENERAL CATEGORY, 1996-2008 (2008 FISHING YEAR DATA AS OF JANUARY 13, 2009).	71
	FIGURE 1: GENERAL CATEGORY BASE SUBQUOTAS (MT, %).	72
	FIGURE 2: CURRENT ATLANTIC BLUEFIN TUNA QUOTA ALLOCATION (%).	73
	FIGURE 3: BFT ADJUSTED QUOTAS AND LANDINGS (MT), 1996-2008.	74
	FIGURE 4: U.S. BASE QUOTAS, ADJUSTED QUOTAS, AND LANDINGS (MT) BY CATEGORY, 2001 AND 2008.	75
	FIGURE 5: 2008 ADJUSTED GENERAL CATEGORY QUOTA AND LANDINGS (MT) PER QUOTA SUBPERIOD.	76
	FIGURE 6: SUCCESSFUL GENERAL CATEGORY TRIPS PER QUOTA SUBPERIOD AND NUMBER OF BFT PER TRIP (DAY)	

FOR 2008.....	77
FIGURE 7: LARGE PELAGICS SURVEY BFT DISTRIBUTION.....	78

1.0 PURPOSE AND NEED FOR ACTION

1.1 Management History

Atlantic tunas are managed under the dual authority of the Magnuson-Stevens Act and ATCA, which authorizes the Secretary of Commerce (Secretary) to promulgate regulations as may be necessary and appropriate to implement recommendations of ICCAT. The authority to issue regulations under the Magnuson-Stevens Act and ATCA has been delegated from the Secretary to the Assistant Administrator for Fisheries, NOAA (AA). On May 28, 1999, NMFS published in the Federal Register (64 FR 29090) final regulations, effective July 1, 1999, implementing the Fishery Management Plan for Atlantic Tunas, Swordfish, and Sharks (1999 FMP). The 1999 FMP included framework provisions to promulgate annual specifications for the BFT fishery, in accordance with ATCA and the Magnuson-Stevens Act, and to implement the annual recommendations of ICCAT. On October 2, 2006, NMFS published in the Federal Register (71 FR 58058) final regulations, effective November 1, 2006, implementing the 2006 Consolidated Atlantic Highly Migratory Species Fishery Management Plan (Consolidated HMS FMP).

The current regulations regarding the General category season and the General and Harpoon category retention limits were first established when the U.S. BFT quota and subquotas generally limited landings.

General Category Maximum Daily Retention Limit

In 1992 the BFT regulations were overhauled in response to quota reductions from ICCAT, and also to address the need to reduce the fishing pressure on small fish and reduce economic incentives to target small fish. In addition, a new size class of large mediums was created and defined as fish that are smaller than giants that may be sold (i.e. 70 to less than 77 inches¹). The General category three fish maximum daily retention limit was in place since the early 1990s, and has been specifically three large medium or giant BFT since 1995.

General Category Season

Prior to 2004, the General category quota was available to all commercial handgear tuna fishermen from the opening of the fishing year on June 1 through the end of the season on December 31. Due to high participation and limited quota, NMFS used effort controls such as restricted fishing days and time period subquotas to slow down the catch rate and distribute landings both geographically and over time. Prior to 1999, despite the implementation of effort controls in the General category, the quota was attained and the General category closed in mid to late summer while BFT were still off northern New England states. Despite the seasonal General category

¹In March 1995, the length definition for each BFT size category was amended to specify BFT size classes relative to curved length measure. Specifically, the large medium size class changed to 73 to less than 81 inches, and the giant size class to 81 inches or greater. This measure was implemented as a more feasible measurement method to apply to BFT on a vessel or at the dock and eased enforcement.

closure, a BFT fishery on large mediums and giants emerged off the coast of North Carolina during February and March. This southern fishery was recreational in nature because it occurred after the General category season closing. In later years, fish began to arrive in the region during the late fall/early winter, and interest in a commercial fishery developed.

During the development of the 1999 HMS FMP, the emergence of a General category BFT fishery in the southern Atlantic region was extensively discussed by the HMS AP and the public. At the time, the majority of General category fishing activity took place in the summer and fall off the New England and Mid-Atlantic coasts. However, the HMS AP did not agree on how the HMS FMP should address the scope of a southern area late season General category BFT fishery. In the early 2000s, NMFS performed a number of inseason quota transfers of BFT, consistent with the transfer criteria established in the 1999 FMP, which allowed the General category BFT fishery to extend into the winter months (i.e., late November - December). In 2002, NMFS received a Petition for Rulemaking from the North Carolina Division of Marine Fisheries to formalize this winter fishery and extend fishing opportunities for the General category into January (67 FR 69502, November 18, 2002). In December 2003, NMFS extended the General category end date from December 31 to January 31 (68 FR 74504, December 24, 2003) to address some of the concerns raised in the Petition, as well as to increase fishing opportunities and optimum yield for the fishery overall. In 2006, NMFS modified the General category time period subquotas to allow for a formalized winter fishery via the Consolidated HMS FMP. These subquotas remain effective and are shown, in Figure 1. The December and January time periods are currently allocated 5.2 percent and 5.3 percent of the General category base quota, respectively.

The BFT fishery was managed on a fishing year basis (June through May) versus a calendar year basis (January through December) starting with the implementation of the 1999 FMP in 2000. In January 2008, management reverted to a calendar year basis per implementation of the Consolidated HMS FMP. As of 2008, the January time period and associated fishing activities now occur at the *beginning* rather than the *end* of the General category season.

Harpoon category daily incidental retention limit

When the Harpoon category was created in 1980, it was allocated a small portion of the handgear quota of giant tuna in recognition that harpooning had long been used as a method of catching giant tuna in the northern fishery and merited a historical niche in the giant fishery. In 1992, NMFS limited incidental retention of large medium BFT to one per day as well as an unlimited number of giants, within the Harpoon category quota (57 FR 32905, July 24, 1992). This action was taken to reduce the fishing mortality on large medium BFT, thus allowing for an increase in the spawning potential of the western Atlantic BFT stock, while allowing for the incidental take of large medium BFT to minimize regulatory discards and negative economic impacts.

In 2003 (68 FR 74504, December 24, 2003), NMFS increased the large medium BFT tolerance limit to two fish per day to allow greater opportunity for Harpoon category participants to fully harvest its subquota and to address Harpoon vessel operator concerns about not being able to locate schools of exclusively giant BFT on the fishing grounds due to the mixing of the larger size classes within schools.

Recent Quota Specification

At its 2008 meeting, ICCAT recommended a reduction in the western Atlantic BFT Total Allowable Catch (TAC), set to allow for rebuilding of the stock through 2018, from 2,100 mt to 1,900 mt for 2009 and 1,800 mt for 2010. These TACs are intended to end overfishing, as defined by the Magnuson-Stevens Act, by 2010. Note that decisions regarding the recommended TACs were made by ICCAT in November 2008 and that analyses of these decisions are not provided as part of this document. As discussed thoroughly in the EA for the 2009 BFT Quota Specifications and Effort Controls (NMFS 2009a), the baseline U.S. quotas for 2009 and 2010, respectively, are 1,009.9 and 952.4 mt, not including the annual allocation of 25 mt to account for incidental catch of BFT by pelagic longline vessels fishing in the Northeast Distant Area. Under the Consolidated HMS FMP, the General and Harpoon categories are allocated 47.1 and 3.9 percent, respectively, of the annual baseline BFT quota. See Figure 2 for the current quota category allocation percentages. For 2009, the General and Harpoon categories received base quotas of 475.7 mt and 39.4 mt, respectively, and adjusted quotas of 623.1 mt and 51.6 mt, respectively (see Table 1).

1.2 Need for Action and Objectives

In recent years, U.S. BFT landings have fallen below their respective ICCAT-recommended quotas (see Figure 3). Factors that may have played a role in the underharvest of the domestic BFT fishery since 2004 include reduced availability of BFT for harvest, possibly due to recent changes in BFT regional availability and/or a reduced BFT population level, and reduced effort due to operational expenses (such as fuel costs). While the recreational Angling category and the commercial Longline category have been able to fill their subquotas in recent years, the commercial handgear categories (General and Harpoon) have not (see Table 2 for 2008 adjusted quotas and landings). In 2008, approximately 48 percent of the baseline and 31 percent of the adjusted General category quota was landed, and approximately 56 percent of the baseline and 36 percent of the adjusted Harpoon category quota was landed. Figure 4 compares base subquotas, adjusted subquotas, and landings by category for 2001, a year in which BFT landings were close to the adjusted quota and 2008, the most recent year for which landings information is complete.

Over the last year, NMFS has received comments suggesting changes that could increase domestic BFT landings within existing quotas and subquotas. NMFS received these suggestions at the HMS Advisory Panel (AP) meetings in 2008 and 2009, during the 2009 BFT quota specifications public hearings, and in recent constituent and congressional correspondence. In response to these suggestions and related ones regarding the Atlantic swordfish fishery, NMFS published an Advance Notice of Proposed Rulemaking (ANPR) (74 FR 26174, June 1, 2009), requesting specific comment on potential regulatory changes that would potentially increase fishing opportunities in the BFT and swordfish fisheries. NMFS specifically requested comment on the following potential changes to the BFT regulations: increasing the General category maximum daily retention limit (currently three BFT greater than 73 inches) or eliminating it; extending the General category season (currently closed February through May); decreasing the commercial minimum size for the General and Harpoon categories and reallocating quota within those categories to allow access to fish under 73 inches; eliminating a retention limit restriction for the Harpoon category; allowing HMS Charter/Headboats

to fish both commercially and recreationally on the same day; and allowing removal of Atlantic tunas tails at sea. Because NMFS had already received substantive comment over the past year both for and against changing BFT regulations, and due to requests for an expedited rulemaking, the comment period for the issues above was 30 days. Comment received ranged from complete support by some industry participants (who generally feel that the regulations were needed when established to *limit* landings to the quota but should be relaxed now that commercial landings are relatively low compared to available quota) to complete opposition by some recreational fishermen, environmental organizations, and other individuals (who generally are concerned that relaxation of the regulations would compromise NMFS' BFT rebuilding and bycatch reduction efforts). The latter were particularly concerned about the potential impacts of a reduction in the BFT commercial minimum size, and several commenters suggested *more* conservative protections for the BFT fishery, such as an increase in commercial minimum size to reflect recent research on the age of BFT maturity and the prohibition of pelagic longlining for other target species during BFT spawning season in known spawning areas.

Following consideration of the wide range of comments received on the ANPR, NMFS proposes this action to increase fishing opportunities for BFT within the existing U.S. quota, particularly within the General and Harpoon category subquotas, which have been underharvested for several years. This proposed action is intended to enable more thorough utilization of the available U.S. quota, while ending BFT overfishing, rebuilding the BFT stock by 2019, and minimizing bycatch and bycatch mortality to the extent practicable.

2.0 SUMMARY OF THE ALTERNATIVES

This section describes the alternatives considered in this draft EA/RIR/IRFA for achieving the objective identified in Section 1.2. Sections 2.1, 2.2, and 2.3, respectively present the alternatives considered regarding the General category maximum daily retention limit, General category season, and Harpoon category daily incidental retention limit. For a summary table of the alternatives considered in this draft EA/RIR/IRFA, see Table 3.

2.1 Issue 1: General category maximum daily retention limit

Effort controls, such as daily retention limits and restricted-fishing days (not implemented for several years), are meant to maximize the opportunity for catching the quota and achieving biological, social, and economic benefits while balancing relative costs and negative impacts. For example, certain effort controls might provide more flexibility for the fishery by increasing retention limits when fish are known to be available on the fishing grounds in certain areas, and then reducing limits at other times so that limited quota may be available to other areas at other times.

Under the current BFT retention limit regulations at §635.25, the default daily retention limit of large medium and giant BFT (measuring 73 inches or greater) is one fish per vessel. To provide for maximum utilization of the quota for BFT, NMFS may increase or decrease the daily retention limit of large medium and giant BFT over a range from zero (on restricted fishing days, if applicable) to a maximum of three per vessel, under NMFS' inseason action authority. Such increase or decrease will be based on the determination criteria and other relevant factors provided under §635.27(a)(8), which are:

- (i) The usefulness of information obtained from catches in the particular category for biological sampling and monitoring of the status of the stock.
- (ii) The catches of the particular category quota to date and the likelihood of closure of that segment of the fishery if no adjustment is made.
- (iii) The projected ability of the vessels fishing under the particular category quota to harvest the additional amount of BFT before the end of the fishing year.
- (iv) The estimated amounts by which quotas for other gear categories of the fishery might be exceeded.
- (v) Effects of the adjustment on BFT rebuilding and overfishing.
- (vi) Effects of the adjustment on accomplishing the objectives of the fishery management plan.
- (vii) Variations in seasonal distribution, abundance, or migration patterns of BFT.

(viii) Effects of catch rates in one area precluding vessels in another area from having a reasonable opportunity to harvest a portion of the category's quota.

(ix) Review of dealer reports, daily landing trends, and the availability of the BFT on the fishing grounds.

The General category quota is utilized by vessels permitted in the Atlantic Tunas General category as well as to those HMS Charter/Headboat permitted vessels fishing commercially for BFT. HMS Charter/Headboat category participants may retain and land BFT under the daily limits and quotas applicable to the Angling or General category, except when fishing in the Gulf of Mexico (where only one recreational “trophy” large medium or giant BFT may be landed). The size of the first BFT retained determines the category applicable that day (e.g., if the first BFT retained is a large medium BFT, the vessel may fish only under the General category limit that day).

During the comment period for the 2009 BFT Quota Specifications and Effort Controls and for the ANPR, NMFS received comments requesting a change to or elimination of the General category maximum daily retention limit to increase opportunities to utilize the General category quota, which has been underharvested for several years. This section describes the three alternatives considered by NMFS regarding the General category maximum daily retention limit. Four alternatives are considered but one is not analyzed further in this EA.

Alternative A1: No action – no change to the current General category maximum daily retention limit

Under this alternative, NMFS would maintain the current General category maximum daily retention limit of three fish (large medium or giant BFT, measuring 73 inches or greater) per vessel.

Alternative A2: Increase the maximum daily retention limit to five BFT (Preferred Alternative)

Under this preferred alternative, NMFS would increase the maximum daily retention limit to five fish per vessel, such that NMFS could increase or decrease the daily retention limit of large medium and giant BFT over a range from zero (on restricted fishing days, if applicable) to a maximum of five per vessel via an inseason action based on the determination criteria and other relevant factors provided under §635.27(a)(8). The intent of this alternative would be to increase opportunities to harvest the General category quota.

Alternative A3: Eliminate the maximum daily retention limit

Under this alternative, NMFS would eliminate the maximum daily retention limit but maintain its authority to increase or decrease the daily retention limit of large medium and giant BFT via an inseason action based on the determination criteria and other relevant factors provided under §635.27(a)(8). The intent of this alternative would be to increase opportunities to harvest the General category quota and to allow the greatest flexibility in selecting the daily retention limit of large medium and giant BFT.

Alternative A4: Allow the daily retention limit to apply for each day of a multi-day fishing trip

Currently, regardless of the length of a trip, no more than a single day's retention limit of large medium or giant BFT may be possessed or retained aboard a vessel that has an Atlantic tunas General category permit. This means that a single day's retention limit applies for vessels taking multi-day trips. During the comment period for the 2009 BFT Quota Specifications and Effort Controls and for the ANPR, NMFS received comments that it is not practical economically for General category vessels to travel offshore for multi-day trips when limited to a maximum of 3 fish. Some commenters requested that NMFS waive this restriction to increase the opportunities and incentive for General category vessels to take multi-day trips to more distant fishing grounds, and suggested that NMFS require vessel monitoring system (VMS) use by these vessels for enforcement purposes (i.e., to verify the length of the trip when more than a single day's retention limit is possessed and retained). However, during the comment period for the ANPR, the industry organization that had originally made this request modified their comment after recognizing NMFS' existing and short-term operational limits regarding vessel monitoring limitations and the difficulty of enforcing a daily retention limit without a VMS program for participating General category. The industry organization instead requested that NMFS increase the maximum daily retention limit to 5 fish. Therefore, Alternative A4 was considered, but not analyzed further in this EA.

2.2 Issue 2: General category season

During the comment period for the 2009 BFT Quota Specifications and Effort Controls and for the ANPR, NMFS received comments requesting extension of the General category season as well as changes to the time period subquotas to increase opportunities to utilize the General category quota. The following three alternatives provide options for the duration of the General category season to address utilization of the existing January subquota. However, because NMFS believes that changes to the General category subquotas would require further discussion and analyses, NMFS is not analyzing the third alternative further in this EA.

Alternative B1: No action - no change to the current General category season

Under this alternative, the General category fishery would be open January 1 through 31, or when the January subquota (adjusted, if applicable) is met, and June 1 through December 31, or when the General category subquotas or overall General category quota is met. The General category fishing season and quota is subdivided among five seasonal time periods as follows (see also Figure 5):

TIME PERIOD	DATES	SUB-QUOTA %
1st	January 1 – January 31	5.3
2nd	June 1 – August 31	50
3rd	September 1– September 30	26.5

4th	October 1 – November 30	13
5th	December 1 – December 31	5.2

Alternative B2: Leave the General category open until the January subquota is reached regardless of date (Preferred Alternative)

Under this alternative, the General category would not automatically close effective February 1 and remain closed through May 31. Instead, the General category season would remain open until the date NMFS determines that the January subquota (adjusted if applicable) has been met. Consistent with existing closure policies, NMFS would publish a closure action for the General category January subquota in the Federal Register.

Alternative B3: Establish a January through December General category fishing season and establish equal monthly General category time periods and subquotas

Under this alternative, NMFS would not close the fishery for the months of February through May, and instead manage a year round season. However, unless the General category subquota allocations also are changed, NMFS would need to close the fishery once the existing January subquota (adjusted, if applicable) is met. Thus, this alternative would have the same effect as Alternative B2. During public meetings for the ANPR, NMFS received requests to reallocate the General category quota evenly across 12 monthly time periods. This concept was raised during preparation of the 2006 Consolidated HMS FMP, but at the time, the suggestion was for allocation of 12.5 percent of the quota to be allocated to each month for the 8 months of June through January, when the fishery was managed on a June through May schedule.

2.3 Issue 3: Harpoon category daily incidental retention limit

During the comment period for the 2009 BFT Quota Specifications and Effort Controls and for the ANPR, NMFS received comments requesting an increase to, or elimination of, the Harpoon category incidental retention limit of large medium BFT. This section describes the three alternatives considered by NMFS regarding the incidental limit.

Alternative C1: No action – no change to current daily incidental retention limit

Under this alternative, Harpoon category participants would be able to retain, possess, and land two large medium BFT (measuring 73 to less than 81 inches) per day.

Alternative C2: Increase the daily incidental retention limit to 4 large medium BFT (Preferred Alternative)

Under this alternative, Harpoon category participants would be able to retain, possess, and land four large medium BFT (measuring 73 to less than 81 inches) per day.

Alternative C3: Eliminate the daily incidental retention limit for large medium BFT

Under this alternative, Harpoon category participants would be able to retain, possess, and land an unlimited number of both large medium and giant BFT per day.

3.0 DESCRIPTION OF AFFECTED ENVIRONMENT

This section includes a brief summary of the status of the stocks, fishery participants and gear types, and affected area including habitat and protected species. For a complete description of the biology and status of BFT and the U.S. tuna fishery, including operations, catches, and discards, please see the 2008 HMS Stock Assessment and Fishery Evaluation (SAFE) Report (NMFS 2008), as well as the latest BFT Stock Assessment (SCRS 2008). Also, for information on interactions and concerns with protected species and the Atlantic tuna fisheries, please see Section 4 of the 2008 SAFE Report. The action area is the Atlantic Ocean, Gulf of Mexico, and Caribbean Sea.

3.1 Status of the Stocks

Western Atlantic BFT are considered overfished and overfishing is occurring. At the 2008 meeting of the Standing Committee on Research and Statistics (SCRS) of ICCAT, stock assessment analyses were prepared for the western and eastern Atlantic stocks of BFT. SCRS cautioned that conclusions of the 2008 stock assessment do not capture the full degree of uncertainty in the assessments and projections, and noted that an important factor contributing to uncertainty is mixing between fish of eastern and western origin. Furthermore, the projected trends in stock size are strongly dependent on estimates of recent recruitment. To address this uncertainty, SCRS strongly advised against an increase in Western Atlantic BFT TAC (at that time, 2,100 mt) and recommended adoption of a lower TAC that would result in a higher probability (than the historical 50-percent probability used to set TACs) that stock biomass at maximum sustainable yield (B_{MSY}) is achieved by the beginning of 2019, the target rebuilding time. SCRS provided projections for a range of TACs for both the high and low recruitment scenarios, looking specifically at probability levels of 50 percent and 75 percent, for consideration in developing management recommendations. The following three paragraphs summarize information and recommendations presented by SCRS to ICCAT for the consideration in setting the western Atlantic BFT TAC.

To determine the outlook, SCRS conducted a medium-term (12-year) evaluation of changes in spawning stock size and yield over the remaining rebuilding period under various management options. In order to provide advice relative to rebuilding the western Atlantic bluefin tuna resource, SCRS conducted projections for two scenarios about future recruitment. The “low recruitment” scenario assumed that future average recruitment will approximate the average of recruitment (at age one) levels observed from 1976 through 2004 (70,000 recruits). The “high recruitment” scenario assumed average recruitment levels would increase as the stock rebuilds (an MSY level of 160,000 recruits). SCRS had no strong evidence to favor one scenario over the other and noted that both are reasonable (but not extreme) lower and upper bounds on rebuilding potential.

The outlook for bluefin tuna in the West Atlantic with the low recruitment scenario is similar to that from the 2006 assessment. The 2008 projections for the low recruitment scenario suggests that catch levels of 2,400 mt would have about a 50-percent chance of rebuilding the stock by 2019; catches of 2,100 mt (the TAC in effect through 2008) would have a 71-percent chance; and catches of 2,000 mt or lower would have greater than a 75-percent chance of rebuilding. A TAC between 2,000 and 2,100 mt would have a 50-percent probability of ending overfishing by the end of 2010 and a

TAC of 1,800 mt increases the probability to 75 percent. If the high recruitment scenario is correct, then the western stock would not rebuild by 2019 even with no catch, although catches of 1,500 mt or less are expected to immediately end overfishing and initiate rebuilding. SCRS also examined an alternative model that excluded the Canadian Gulf of St. Lawrence catch per unit of effort (CPUE) index, noting considerations of possible resource re-distribution, and the observation that the recent high values were difficult to reconcile with other available fisheries data, and could reflect the impact of a single or a limited number of strong year-classes. The levels of catch that lead to rebuilding with that alternative model are lower; 1,800 mt would have about a 50-percent chance and 1,500 mt would have a 75-percent chance.

SCRS again noted that evidence is accumulating which indicates that both the productivity of western Atlantic BFT and western BFT fisheries are linked to the eastern and Mediterranean stock. Therefore, management actions taken in the eastern Atlantic and Mediterranean are likely to impact the recovery in the western Atlantic, because even small rates of mixing from East to West can have significant effects on the West due to the fact that the Eastern plus Mediterranean resource is much larger than that of the West.

At the 2008 meeting, ICCAT adopted a recommendation to decrease the annual quota of BFT in the western Atlantic Ocean from 2,100 mt to 1,900 mt for 2009 and 1,800 mt for 2010, consistent with the rebuilding program for western Atlantic BFT established in 1998. An 1,800-mt TAC represents a 14-percent reduction from the 2008 level and is intended to end overfishing with a 75-percent probability of success. A new SCRS stock assessment is expected to be conducted in 2010, and the ICCAT parties with allocations of western Atlantic BFT agreed to renegotiate the quota allocations for this stock in 2010.

3.2 Fishery Participants, Gear Types, and Affected Area

There are nearly 43,000 permitted vessels that may participate in the Atlantic tuna fisheries. Vessels permits are issued in five directed fishing categories and two incidental fishing categories (Table 4). Generally, permits are issued for a distinct fishery by gear types, and participants are restricted to the use of only those allowed gears. For directed fisheries on BFT, these gears consist of purse seine, rod and reel, harpoon, handline, bandit gear, and greenstick (which is used primarily to harvest yellowfin tuna). Pelagic longline gear is not an allowed gear type for directed fishing on BFT; it is used to target other HMS species, primarily swordfish, bigeye, and yellowfin tuna. However, NMFS allocates a quota for landings of incidentally-caught BFT by longline and trap gear. Atlantic Tunas, HMS Charter/Headboat, and HMS Angling category permits are issued over the internet, telephone or mail. Regulations currently allow vessels to be permitted in only one category per year and allow for only one permit category change to occur during the permit renewal period. For those applicants who inadvertently select an incorrect category, corrections must occur within 10 calendar days from the permit date of issuance; otherwise, applicants must wait until the following season to change the permit category.

U.S. landings of BFT for the 1996-2008 period are provided in Table 5. The historical level of landings has generally been determined by quotas since 1982. Commercial fisheries are focused

on large medium (73 inches to less than 81 inches) and giant (81 inches or greater) BFT, while recreational fisheries are focused on large school/small medium BFT (47 inches to less than 73 inches), with allowances for school (27 inches to less than 47 inches), large medium, and giant BFT. Commercial categories are monitored by a census of landing cards, whereas the recreational catch is monitored primarily by survey, although the states of Maryland and North Carolina have implemented recreational census BFT tagging programs as well.

As described in Section 1.1, the BFT fishery was managed on a calendar year basis (January through December) for 1996 through 1999 and a fishing year basis (June through May) for 2000 through 2006. The 2007 fishing year was June 1, 2007-December 31, 2007, serving as a transition back to calendar year management that began in 2008. Table 5 landings are presented on a calendar year (versus fishing year) basis for 1996 through 1999, and for 2008.

The majority of BFT landings are taken by handgear fisheries in the commercial General category and recreational Angling and Charter/Headboat categories. The distribution of fishing activity for BFT is generalized in Table 6. General category fisheries are focused in New England during the summer and fall, and the South Atlantic during the winter. However, in the last several years, the availability of commercial-sized BFT to the commercial fisheries, particularly off New England appears to have declined dramatically, while the Canadian commercial quota has been approached or met. The low level of U.S. commercial landings relative to quotas in the last several years led the SCRS to consider two plausible explanations in its 2009 stock assessment: (1) that availability of fish to the U.S. fishery has been abnormally low, and/or (2) the overall size of the population in the Western Atlantic declined substantially from the level of recent years. SCRS noted that while there is no overwhelming evidence to favor either explanation over the other, the base case assessment [which excluded the Canadian Gulf of St. Lawrence catch per unit effort (CPUE) index since inclusion might produce overly optimistic results] implicitly favors the first hypothesis (regional changes in availability) because a large recent reduction in spawning stock biomass is not estimated. Nevertheless, SCRS noted that substantial uncertainty remains on this issue and more research needs to be done.

Recreational fisheries are prosecuted by private vessels fishing in the Angling category and vessels for hire fishing under the Charter/Headboat category. The Consolidated HMS FMP notes that charter/headboats have been targeting school BFT off New York and New Jersey since the early 1900s. School BFT are recreationally targeted off Virginia, Delaware, and Maryland during the summer and off New Jersey and New York as the summer progresses. In recent years, school BFT have been increasingly available to southern New England fisheries, i.e., school BFT have been appearing and caught further north than in the past. Fishery landings and school BFT availability generally decline in the fall with colder water temperatures and degrading fishing conditions. Recreational fishing also takes place for large medium and giant BFT in the South Atlantic winter fishery, and the Consolidated HMS FMP notes that this fishery includes an active charter/headboat fishery. Large school and small medium BFT are landed by private and charter/headboat fisheries in summer and early fall off Virginia, Delaware, Maryland, New Jersey, and Massachusetts, but are overall less accessible to New York, Connecticut and Rhode Island fisheries. Large school and small medium BFT are also available in the South Atlantic winter fishery. In general, BFT fisheries vary

from year to year since the exact availability of BFT and the demand for fishing opportunities is unpredictable.

BFT migration throughout the Atlantic is the subject of much research and affects the availability of harvest for regional fisheries. Over the last few years, fishermen have noted a substantial decline in the availability of large medium and giant BFT in the New England area. Commercial landings by General category fishermen, Harpoon category fishermen, and Purse Seine category fishermen have also been suppressed relative to the end of the 1990s and early 2000s, resulting in large underharvests of commercial quotas (Table 5). In 2007, purse seine activity for BFT was very low and in 2008, no BFT were landed using this gear type. Conversely, the ratio of landings to quota has been very high for the Angling category, relative to that for other categories, particularly in 2007 and 2008, although time lags in receipt and analyses of survey data, and uncertainty inherent in estimation procedures, mean delayed calculation of final landings estimates.

3.3 Habitat

The Magnuson-Stevens Act requires the identification and description of EFH in FMPs and the consideration of actions to ensure the conservation and enhancement of such habitat. The EFH regulatory guidelines (50 CFR 600.815) state that NMFS should periodically review and revise EFH, as warranted, based on available information.

The area in which this action is planned has been identified as Essential Fish Habitat (EFH) for species managed by the New England Fishery Management Council, the Mid-Atlantic Fishery Management Council, the South Atlantic Fishery Management Council, the Gulf of Mexico Fishery Management Council, the Caribbean Fishery Management Council, and the HMS Management Division of NMFS. There are major oceanographic features such as currents, temperature gradients, eddies, and fronts that occur on a large scale and may influence the distribution patterns of many oceanic species, including HMS.

HMS EFH is described in detail in the Final EIS for Amendment 1 to the 2006 Consolidated HMS FMP (74 FR 28018, June 12, 2009) (NMFS 2009 b). A summary of EFH for BFT is as follows:

- **Spawning, eggs, and larvae:** In the Gulf of Mexico from the 100 meter depth contour to the EEZ , continuing to the mid-east coast of Florida.
- **Juveniles (<231 cm FL):** In waters off North Carolina, south of Cape Hatteras, to Cape Cod.
- **Adults (≥231 cm FL):** In pelagic waters of the central Gulf of Mexico and the mideast coast of Florida. North Carolina from Cape Lookout to Cape Hatteras, and New England from Connecticut to the mid-coast of Maine.

Generally, the target species of the HMS fishery management units are associated with hydrographic structures of the water column, e.g., convergence zones or boundary areas between

different currents. Because of the magnitude of water column structures and the processes that detect them, there is little effect on habitat that can be detected from BFT fishing activities.

3.4 Protected Species under the Endangered Species Act (ESA) and Marine Mammal Protection Act (MMPA)

Protected species include marine mammals and ESA-listed species. For the most recent information on ESA Biological Opinions (BiOps) for most HMS fisheries, please refer to the Final Consolidated HMS FMP (NMFS 2006). The Final Consolidated HMS FMP provides a comprehensive description of the Reasonable and Prudent Measures and Terms and Conditions implemented pursuant to several recent BiOps for sea turtles. Additionally, the Final Consolidated HMS FMP discusses marine mammal interactions with HMS fisheries and the impact of the MMPA on HMS management activities.

The primary gear types used for directed BFT fisheries are handgear and purse seine gear, which were consulted on under the 2001 BiOp for HMS fisheries. The BiOp determined that operation of these fisheries as proposed is not likely to jeopardize the continued existence of endangered or threatened species, including sea turtles. A 2004 BiOp determined that the continued operation of the pelagic longline (PLL) fishery as proposed (for which direct BFT fishing is not permitted but for which incidental BFT retention is permitted) is not likely to jeopardize the continued existence of loggerhead, green, hawksbill, Kemp's ridley, or olive ridley seas turtles, but is likely to jeopardize the continued existence of leatherback sea turtles. Where a jeopardy finding is made, the BiOp may identify Reasonable and Prudent Alternatives (RPAs) that can be implemented and would avoid the likelihood of jeopardy. See Section 4.5 for further discussion of consultations and BiOps issued for HMS Fisheries, including more detail on implementation of the RPAs.

In 2006, NMFS convened a pelagic longline take reduction team (PLTRT) to address the serious injury and mortality of short-finned pilot whales, long-finned pilot whales, and Risso's dolphins in the mid-Atlantic portion of the Atlantic pelagic longline fishery. The PLTRT provided consensus recommendations in a Draft Take Reduction Plan (PLTRP) to NMFS. The Draft PLTRP included recommendations for management strategies and research priorities and formed the basis of a proposed rule. The proposed rule published in the *Federal Register* on June 24, 2008 (73 FR 35623) and included regulatory and non-regulatory actions to reduce serious injuries and mortalities of pilot whales and Risso's dolphins incidental to the commercial Atlantic pelagic longline fishery to insignificant levels. The final rule (74 FR 23349) published on May 19, 2009, and effective on June 18, 2009, included a special Mid-Atlantic research area, gear modifications, outreach material, observer coverage, and captains' communications.

The MMPA (16 U.S.C. 1361 *et seq.*) established, with limited exceptions, a moratorium on the "taking" of marine mammals and is the one of the principal Federal statutes that guide marine mammal species protection and conservation policy. Under MMPA requirements, NMFS produces an annual List of Fisheries that classifies domestic commercial fisheries, by gear type, relative to their rates of incidental mortality or serious injury of marine mammals. The List of Fisheries includes three classifications:

- Category I fisheries are those with frequent serious injury or mortality to marine mammals (e.g., PLL);
- Category II fisheries are those with occasional serious injury or mortality (e.g., shark gillnet); and
- Category III fisheries are those with remote likelihood of serious injury or mortality to marine mammals (e.g., rod and reel, purse seine, harpoon).

Fishermen participating in Category I or II fisheries are required to register under the MMPA and, if selected, to carry an observer aboard their vessels. Vessel owners or operators, or fishermen, in Category I, II, or III fisheries must report all incidental mortalities and injuries of marine mammals during the course of commercial fishing operations to NMFS. Incidental take by recreational fishermen is not authorized (i.e., it is illegal). Thus there is no reporting requirement. At the 2008 meeting, ICCAT adopted the SCRS recommendation to decrease the annual quota of BFT in the western Atlantic Ocean from 2,100 mt to 1,900 mt for 2009 and 1,800 mt for 2010, consistent with the rebuilding program for western Atlantic BFT established in 1998. An 1,800-mt TAC represents a 14-percent reduction from the current level and is intended to end overfishing with a 75-percent probability of success. A new SCRS stock assessment is expected to be conducted in 2010, and the ICCAT parties holding an allocation of western Atlantic BFT agreed to renegotiate the quota allocations for this stock in 2010. NMFS does not require reporting and authorizes takes by charter/headboat fishermen (considered “commercial” by the MMPA). No takes have been reported to NMFS to date.

The purse seine fishery and handgear (hook-and-line and harpoon) fisheries are currently listed as a Category III fisheries under the MMPA. Strict control and operations of these fishing gears means these gear types are not likely to result in mortality or serious injury of marine mammals or sea turtles. The pelagic longline fishery is listed as a Category I fishery. As mentioned above, longline gear is known to present potential dangers to listed sea turtles and marine mammals, and the activity of the fishery is regulated by the terms of the BiOp dated June 1, 2004.

There is little or no formal record of interactions between the General and Harpoon category fisheries for Atlantic tunas and protected, endangered, or threatened species. Please refer to Sections 3.8 and 3.9.9 of the Consolidated HMS FMP for additional information on potential interactions of Atlantic HMS fisheries with protected species and marine mammals. Sections 3.9.9.1 and 3.9.9.2 specify the 22 cetacean species that are or could be of concern with respect to potential interactions with HMS fisheries.

4.0 ENVIRONMENTAL CONSEQUENCES OF ANALYZED ALTERNATIVES

The impacts of alternatives identified in Section 2 are discussed separately in the following subsections by issue and in the context of the relevant Magnuson-Stevens Act National Standards and the objectives of the Consolidated HMS FMP. The economic impacts of each alternative are briefly summarized in the following sections, and are described more fully in Sections 6, 7 (RIR), and 8 (IRFA).

Impacts of handgear used to fish for Atlantic tunas under the Atlantic Tunas General and Harpoon categories are described in full in the Consolidated HMS FMP (NMFS 2006). Rod and reel, handline, bandit gear, and harpoon gear are selective gears that are used to capture only one large pelagic fish (primarily BFT but also swordfish) at a time. Bycatch and bycatch mortality of commercial handgear is considered to be low, particularly for harpoons, which are thrown at individual fish determined by the fisherman to be greater than the minimum commercial size. As discussed in Section 3.4, there is no information or evidence of interactions between harpoon users targeting Atlantic tunas and threatened or endangered sea turtles, marine mammals, or other protected resources.

4.1 Issue 1: General category maximum daily retention limit

Ecological Impacts

There were 4,721 vessels permitted in the Atlantic Tunas General category and 4,827 vessel permitted in the HMS Charter/Headboat category as of December 31, 2008. Of the 845 trips taken in which at least one large medium of giant BFT was harvested under General category quota (i.e., by either General or Charter/Headboat category vessels), there were 699 on which one large medium or giant BFT was retained (83 percent of trips), 109 on which two large medium of giant BFT were retained (13 percent of trips), and 37 on which three large medium or giant BFT were retained (4 percent of trips) (see Figure 6). Under the current ICCAT BFT recommendation, the United States may not carry forward more than 50 percent of the U.S. base quota. In recent years, NMFS has carried forward the allowed amount of BFT underharvest from one year to the next, and distributed that amount after taking several management issues into consideration. This resulted in each quota category receiving a portion of the underharvest, but not equal to that categories' exact underharvest from the prior year. For instance, 2008 General category landings were 230 mt out of 740 mt of available quota, resulting in an underharvest of 510 mt. The amount carried forward to the 2009 fishing year under the 2009 quota specifications was 147.4 mt. The net difference is 362.6 mt of General category quota that is not available for harvest. By maintaining the current incidental limit under Alternative A1, the unharvested BFT may have an additional opportunity to spawn and the intent of the current regulations to protect immature fish would be maintained.

Although discard data regarding commercial sized BFT is not collected from General category and Charter/Headboat category vessels, NMFS estimates that the discard of large medium BFT was relatively low, given that only 37 of 845 trips (4 percent) 7 trips landed the maximum daily retention limit of BFT in 2008. However, based on information from NMFS' Large Pelagics Survey

over the last several years, NMFS anticipates that a large proportion of the BFT available of the U.S. coast in 2010 will be entering the large medium size class (see Figure 7). Under Alternative A1, there is an increasing likelihood of large medium BFT discards due to the growing relative abundance of this size class.

Under Alternative A2, NMFS estimates that an increase in the maximum daily retention limit per vessel to five large medium or giant BFT may lead to an increase in fishing effort based on the number of trips that may have been constrained by the current maximum daily retention limit of three fish. If these 37 trips that landed three BFT were able to capture and land an additional two fish each, 74 additional large medium or giant fish could be harvested and counted against the General category quota. This alternative is expected to have neutral to slightly negative ecological impacts. To the extent that large medium and giant BFT that would otherwise be discarded dead could be converted to landings, the impact would be neutral. Negative impacts could result from increased bycatch and bycatch mortality of small medium BFT (measuring 59 to less than 73 inches), which would have to be discarded as retention of BFT under 73 inches is prohibited in the commercial fisheries, and increased bycatch and bycatch mortality of large medium and giant BFT caught in excess of the five fish daily retention limit, if NMFS sets the limit at five fish via a separate action. The removal of a greater number of large medium and giant BFT than the status quo alternative (A1) may decrease spawning potential and subsequently have negative impacts on the stock. Some environmental organizations have commented during the ANPR that elimination of the maximum daily retention limit could also result in a substantial proportion of a school of BFT being taken at one time, having widespread age and/or genetic impacts on the stock. However, the limited nature of this action, particularly given the low General category success rate in retaining the current maximum daily retention limit of three fish, is unlikely to have any differential impacts on the life history or overall biological distribution of the western Atlantic BFT stock.

Regardless of the alternative selected, NMFS would continue to maintain and exercise its authority to increase or decrease the daily retention limit as necessary following consideration of the determination criteria described above. This provision of the regulations provides some safeguard, if needed, to reduce potential negative impacts of fishing effort. Although few data are available, it is believed that the selective nature of hook and line and harpoon gear used by vessels fishing under the General category quota have minimal impact on discards or interactions with non-target species.

Alternative A3, elimination of the maximum daily retention limit, could have greater negative ecological impacts to the stock than Alternative A2 due to the removal of additional large medium and giant BFT. Relative to Alternative A2, similar or greater negative impacts could result from increased bycatch and bycatch mortality of small medium BFT just below 73 inches resulting from increased directed effort on large medium and giant BFT. Again, NMFS would continue to maintain and exercise its authority to increase or decrease the daily retention limit as necessary and appropriate via inseason action.

Socioeconomic Impacts

The primary potential impact of this alternative is the continued inability of the General

category (and Charter/Headboat category, when fishing commercially) to catch the annual General category quota. Although some amount of quota carryforward is possible for 2010, the current ICCAT BFT recommendation will lower the overall amount available to be carried forward after 2010, and this will reduce the potential carryforward to each quota category. Unharvested General category quota in 2008 unavailable for harvest equaled 362.6 mt with an approximate value of \$6.75 million (using an average price for General category landings in 2008 of \$8.44/lb round weight) (see Table 2 for landings vs. adjusted quota and Table 7 for ex-vessel average price by category). Under Alternative A1, socioeconomic impacts would be expected to be similar to those in 2008. Increased revenues under Alternatives A2 and A3 would depend greatly on availability of large medium and giant BFT to the fishery. Data from 2008 suggest that only 4 percent of the trips were potentially constrained by a three fish maximum daily retention limit, although comment from some Charter/Headboat operators during the ANPR suggests that it is the tendency of a charter vessel that has retained a commercial-sized BFT to return to port to sell the fish rather than continuing to fish for additional large medium or giant BFT, notably if a paid party is on board. Net revenues may decrease if search time (e.g., fuel expenditure) increases.

Under Alternative A2, if NMFS increases the maximum daily retention limit from three fish to five fish per vessel and sets the daily retention limit at that level, it could be expected that the number of large medium and giant BFT landed and sold would increase substantially (by approximately 66 percent). Given that General category landings were less than one-third of the adjusted General category quota in 2008, the quota would accommodate such an increase. However, that assumes each trip taken could locate and harvest a total of five fish. In 2008, only 37 trips (4 percent) landed three large medium or giant BFT. Using this amount as a proxy for potential trips resulting in landings of five large medium or giant BFT, a total of 74 additional fish would be landed relative to the status quo alternative. Increased revenues would depend on availability of large medium and giant BFT to the fishery, as well as the daily retention limit set by NMFS through inseason action. Nonetheless, this preferred alternative would provide General and Charter/Headboat category vessels a reasonable opportunity to harvest the allocated General category quota in its designated time frame and allow greater fishing efficiency (i.e., by allowing vessels to attain a higher level of landings in a fewer number of trips and by increasing incentives for vessel operators to take multi-day trips). This alternative also would have positive socioeconomic impacts, as it would convert dead discards of large medium and giant BFT to landings.

Under Alternative A3, with the elimination of the maximum daily retention limit, it could be expected that the number of large medium and giant BFT landed and sold would increase substantially. However, because only 4 percent of General category trips landed the current maximum daily retention limit of three fish, NMFS does not anticipate a substantial increase in fish landed even without limit, given recent availability of BFT. Increased socioeconomic impacts would be similar to or greater than under Alternative A2, depending on availability of large medium and giant BFT to the fishery and the daily retention limit set by NMFS through inseason action. This alternative would provide NMFS the greatest flexibility in selecting the appropriate General category daily retention limit.

4.2 Issue 2: General category season

Ecological Impacts

Minimal, if any, ecological impacts are expected as a result of adjusting the General season, time-periods, and/or associated subquotas because the overall quotas and size-classes of BFT being targeted by the General category would not be changed. These small orders of change, quantified in either numbers of fish or in weight (mt), or time and/or location of harvest, compared to overall U.S. harvest levels as recommended by ICCAT under the 20-year rebuilding program, equate to ecological impacts that are unlikely to be measurable given the variability in the data used to conduct BFT stock assessments. Additionally, the numbers of BFT harvested from each different size-class would remain consistent with the levels of BFT mortality used in the stock assessment. Therefore NMFS does not expect any negative ecological impacts from the following alternatives, as they relate to the ICCAT-recommended rebuilding program for BFT.

Alternative B1 (No Action) would maintain the General category season and time period subquota allocation scheme as stated in the 2006 Consolidated HMS FMP. The BFT fishery has been managed via these allocations and procedures since 2007. These allocations and procedures are consistent with the ICCAT recommendations; therefore, NMFS does not expect this alternative to result in any negative ecological impacts beyond those accounted for in the 20-year ICCAT BFT rebuilding program.

Alternative B2 would allow the General category to remain open at the beginning of the calendar year until the January subquota is determined to be fully harvested. To effect this change, NMFS would adjust the BFT quota regulation that specifies the time period for which the first General category subquota is available, such that the period that begins January 1 would end upon the effective date of a closure notice that NMFS would file with the Office of the Federal Register when the quota apportioned to the period that begins January 1 is projected to be reached, or May 31, whichever comes first. NMFS would continue to carry forward unharvested General category quota from one time period to the next time period. NMFS expects that this action effectively would lengthen the General category season by a few weeks, but the duration of the extension would depend on weather conditions and availability of large medium and giant BFT to the fishery during the winter months.

Alternatives B2 may result in a shift in BFT landings, both temporally (to later in the season) and geographically to the South (i.e., off the South Atlantic states of North Carolina, South Carolina, Georgia, and the Florida East Coast). However, the number of BFT harvested from the large medium and giant size classes would remain consistent with the levels of BFT mortality used in the stock assessment. These temporal and spatial shifts in landings could result in a slight decrease or increase in protected resource interactions, discards, and incidental catch of other finfish. However, given the limited nature of this alternative, which would likely extend the winter fishery by less than a few weeks, NMFS does not expect any adverse ecological impacts. For further information/analyses regarding commercial handgear interactions with protected resources, see Section 3.4 of this EA and

Sections 3.8 and 3.9.9 of the Consolidated HMS FMP. Alternative B2 would be expected to broaden the range of data available for scientific research, although the scope by which data would broaden for Alternative B2 is relatively small. In 2009, the General category full base subquota of 25.2 mt was harvested by the January 31 fishery closure date. For 2009, the adjusted General category January subquota was 33 mt. January landings totaled 27.8 mt, 5.2 mt less than the adjusted January subquota (announced in the final 2009 specifications later in the fishing year). Although it would depend greatly on weather conditions and BFT availability, NMFS estimates that the General category fishery could have remained open approximately one more week if the adjusted January subquota was announced during the winter fishery and closure on January 31, 2009, had not automatically applied. It is operationally difficult for NMFS to publish final quota specifications by the beginning of the calendar fishing year (i.e., by January) when there is a new ICCAT BFT recommendation to implement. This was the case for 2007 and 2009, and will likely be the case for 2011.

Alternative B3 would allow the General category to remain open year-round and would revise subquotas so that they are evenly distributed throughout the year. NMFS would continue to carry forward unharvested General category quota from one time period to the next time period. Alternatives B3 may result in a shift in BFT landings, both temporally (to later in the season) and geographically to the South (i.e., off the South Atlantic states of North Carolina, South Carolina, Georgia, and the Florida East Coast). Specifically, the time-period subquota percentage for January would be increased (from 5.3 percent to 8.3 percent) and the time-period subquota for September would be decreased (from 26.5 percent to 8.3 percent). As a result, there might be increased harvest in the earlier portions of the General category BFT season, but there would also be a corresponding decrease in harvest in the later portions of the season. The number of BFT harvested from the large medium and giant size classes would remain consistent with the levels of BFT mortality used in the stock assessment. These temporal and spatial shifts in landings could decrease or increase protected resource interactions, discards, and incidental catch of other finfish. However, given the limited nature of this alternative, which would likely extend the winter fishery by less than a few weeks, NMFS does not expect any adverse ecological impacts. For further information/analyses regarding commercial handgear interactions with protected resources, see Section 3.4. Alternative B3 would be expected to broaden the range of data available for scientific research, although the scope by which data would broaden for Alternative B3 is relatively small. Because there would be a dedicated quota for each month of the year, Alternative B3 could provide commercial fisheries data for times (i.e., February through May) when the fishery was traditionally closed or closed when quotas have been reached, as described in Alternatives A1 and A2, respectively.

Socioeconomic Impacts

Alternative B1 would maintain the General category time periods and subquota allocation scheme established in the 2006 Consolidated HMS FMP. This alternative may have both positive and negative social and economic impacts. The positive impacts could be attributed to the General category time-periods and associated subquota allocation percentages remaining consistent with those of prior years, i.e., they would continue to have the potential to harvest the same percentage of the quota and earn the equivalent share of total ex-vessel revenues. Although the General category

season length and subquota allocations were adjusted in the Consolidated HMS FMP to provide additional fishing opportunities during the winter fishery, it's possible that the status quo alternative would have some adverse social and economic impacts on fishermen, dealers, and the support industries located in the South Atlantic region. Under the No Action alternative, winter General category fishery participants have not filled the full January subquota in the last few years. During seasons where BFT are not available in the area off the South Atlantic states until January, the automatic closure of the General category fishery on January 31 may have negative economic impacts for General category and Charter/Headboat category participants. These adverse impacts could be mitigated if BFT were available during December when quota is typically available due to the carryforward of underharvest from the prior time periods, or if South Atlantic General category participants were to travel north in the summer and fall portions of the season. Overall, the adverse social and economic impacts associated with this alternative outweigh the positive impacts.

The potential gross revenues generated under the No Action alternative were calculated for each specific time-period by using the status quo time-period subquota allocation percentages, the whole weight equivalent (in metric tons and pounds), and the average ex-vessel prices (whole weight) for 2008, inclusive. See Table 8.

Alternative B2, the preferred alternative, would increase the likelihood of winter General category participants and Charter/Headboat participants, when fishing commercially, being able to harvest the full January subquota, particularly if the adjusted January quota is established during the winter portion of the season. An increase in optimum yield may result from a potential increase in the geographic and temporal distribution of landings. Increases in positive socioeconomic impacts would depend on the availability of BFT to the fishery from the beginning of February until the BFT January subquota (base or adjusted, as applicable) is reached. NMFS estimates the value of the unused 5.2 mt of adjusted January 2009 subquota, using the January 2008 average price/lb of \$11.20, at \$128,395.

Alternative B3, which would create a year-round fishery and divide the General category quota into 12 equal allocations of 8.3 percent each, would have both positive and negative social and economic impacts as it would provide some stability to the constituency by establishing a known amount of quota that would be available at the first of each month. However, if catch rates are high in the early portion of the month, these quotas could be harvested rapidly and may lead to derby style fisheries on the first of each month, which is contrary to NMFS' intent. This alternative would extend winter fishery opportunities, but would do little to recognize historical General category BFT allocations, thereby potentially excluding a group of long-time participants. Positive social and economic impacts for those General category and Charter/Headboat category participants located in, or traveling to, the South Atlantic region would likely result from an increase in allocation (from a total of 10.5 percent to 33.2 percent total over the months of December through March of the following year, when large medium and giant BFT are generally available to the southern area fishery). NMFS estimates the value of this increase, using 2008 base quotas and an estimated \$12/lb for December and January, at approximately \$2.8 million.

General category and Charter/Headboat category participants in the New England area, or

those participants that pursue BFT in the summer months, might experience some adverse social and economic impacts due to the shift in quota to the earlier portion of the season. For instance under this alternative, the status quo September time-period subquota allocation would be reduced by approximately 69 percent, resulting in decreased gross revenues of approximately \$1.5 million. However, to the extent that unused quota would roll forward from one period to the next, negative impacts on northern area participants would be reduced. This alternative would assist in distributing the General category BFT catch, temporally and geographically, which is beneficial for the collection of commercial fishery data and may assist in avoiding large scale landings in a constrained time frame, thus reducing market gluts.

4.3 Issue 3: Harpoon category daily incidental retention limit

Ecological Impacts

There were 26 vessels permitted in the Harpoon category as of December 2008. Of the 135 BFT taken by Harpoon vessels in 2008, 66 were large medium BFT. Of the 87 successful trips taken by Harpoon category vessels in 2008 (i.e., trips on which at least one BFT was landed), there were 33 trips on which no large medium BFT were landed, 42 trips on which one large medium BFT was landed, and 12 trips on which two large medium BFT were landed. In 2008, the Harpoon category landings were 22 mt out of 61.2 mt of available quota, resulting in an underharvest of 39.2 mt. As described above, underharvest carried forward to each quota category is limited by the ICCAT recommendation and other domestic management considerations. The amount carried forward to the 2009 fishing year under the 2009 quota specifications was 12.2 mt. The net difference is 27 mt of Harpoon quota that was is not available for harvest and will not be harvested. By maintaining the current incidental limit under Alternative C1, the unharvested BFT may have an additional opportunity to spawn and the intent of the current regulations to protect immature fish would be maintained.

Although discard data is not collected from harpoon vessels, NMFS estimates that the discard of large medium BFT was relatively low, given that only 12 of 87 trips (14 percent) landed the incidental limit in 2008. However, as described above, NMFS anticipates that a large proportion of the BFT available off the U.S. coast in 2010 will be entering the large medium size class (see Figure 7). Harpoon participants have commented over the years that it is common for schools to be comprised of BFT of different size classes, so fishing on schools of giant BFT exclusively is difficult. Under Alternative C1, there is an increasing likelihood of large medium BFT discards while targeting giant BFT due to the growing relative abundance of this size class.

Under Alternative C2, an increase in the daily incidental retention limit to four large medium BFT, Harpoon category landings of large medium BFT could be expected to double landings relative to the status quo to approximately 132 fish. However, only 12 Harpoon category trips resulted in landings of two large medium BFT in 2008. This suggests that an anticipated increase would be much lower, i.e., 24 fish (12 trips x 2 fish per trip). This alternative is expected to have neutral to slightly negative impacts with regard to large medium BFT. To the extent that large medium BFT discards could be converted to landings, the impact would be neutral. Negative impacts could result

from increased bycatch and bycatch mortality of small medium BFT (measuring 59 to less than 73 inches) and large medium BFT in excess of the incidental limit while attempting to catch giant BFT, particularly as NMFS anticipates potential increases in large medium BFT abundance in the next few years. The removal of a greater number of large medium BFT than the status quo may decrease spawning potential and subsequently have negative ecological impacts on the stock. Although few data are available, it is believed that the selective nature of harpoon gear has minimal impact on discards or interactions with non-target species. Increasing the daily retention limit may have the unintended effect of increasing incentive to target large medium BFT. However, only 14 percent of Harpoon category trips in 2008 landed the incidental limit of two large medium BFT, and NMFS does not expect changes in fishing behavior as a result of these Harpoon category alternatives.

Under Alternative C3, elimination of the incidental limit would have the effect of dropping the target size from 81 inches to 73 inches and provide incentive to target large medium BFT. It would be possible for the entire Harpoon category quota to be attained with large medium BFT. This could result in a mortality increase of approximately 75 to 125 fish, relative to the entire quota being harvested with giant BFT landings, depending on future average fish weight and assuming a similar quota to the adjusted 2009 quota of 51.6 mt. This alternative could have greater negative ecological impacts to the stock than Alternative C2 due to the removal of additional large medium fish as well as overall number of fish from the BFT stock. Negative impacts could result from increased bycatch and bycatch mortality of small medium BFT just below 73 inches resulting from increased directed effort on large medium BFT. These fish would have to be discarded as fish under 73 inches are prohibited in the commercial fisheries.

Socioeconomic Impacts

The primary potential socioeconomic impact of this Alternative C1 is the continued inability of the Harpoon category to catch its annual quota. Although some amount of quota carryforward is possible for 2010, the current ICCAT BFT recommendation will lower the overall amount available to be carried forward after 2010. Unharvested quota in the Harpoon category fishery in 2008 equaled 39.2 mt with an approximate value of \$550,000 (using an average price for Harpoon category landings in 2008 of \$6.36/lb) (see Tables 2 and 7). In addition, net revenues may decrease if search time (e.g., fuel expenditures) increases.

Under Alternative C2, it could be expected that the number of large medium BFT landed and sold would double. Given that the Harpoon category harvested only about one third of its adjusted quota in 2008, the quota would accommodate such an increase. However, as described above, an estimated 24 additional fish would be anticipated to be landed relative to the status quo based on 2008 landings. This preferred alternative would provide Harpoon category vessels a reasonable opportunity to harvest the allocated Harpoon category quota in its designated time frame and convert dead discards to landings, thus increasing ex-vessel revenues per trip and optimum yield. Increased socioeconomic impacts would depend on availability of large medium BFT to the fishery.

Under Alternative C3, Harpoon category participants would have the flexibility of attaining the Harpoon quota without specific incidental limits on large medium BFT. This alternative would

have positive impacts in that it would convert dead discards of large medium BFT to landings and allow greater fishing efficiency (i.e., allow vessels to attain a given level of landings in a fewer number of trips), thus increasing optimum yield. It is possible the Harpoon category quota would be filled prior to the end of the season (November 15 of each year), depending on availability of large medium BFT to the fishery, and that NMFS would need to close the fishery. Negative socioeconomic impacts could result for some vessels that may not participate early in the Harpoon category season, but NMFS estimates that would affect very few of the 26 permitted vessels.

Conclusion

Alternatives A2 and B2 are the preferred alternatives for the General category maximum daily retention limit and General category season, respectively. Alternative C2 is the preferred alternative for the Harpoon category daily incidental retention limit. These alternatives are preferred because they would provide additional opportunities to harvest the General and Harpoon category quotas and overall U.S. quota, which has been established consistent with ICCAT's western BFT rebuilding program, while balancing concerns regarding BFT stock health.

4.4 Impacts on Essential Fish Habitat

The Magnuson-Stevens Act established a program to promote the protection of EFH in the review of projects conducted by Federal agencies, or under Federal permits, licenses, or other authorities that affect or have the potential to affect such habitat. After the Secretary has identified EFH, Federal agencies are obligated to consult with the Secretary with respect to any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken, by such agency that may adversely affect any EFH. The analysis in the 2006 Consolidated HMS FMP indicated that most HMS gears are fished in the water column and the impacts on EFH are generally considered negligible. HMS gears do not normally affect the physical characteristics that define HMS EFH such as salinity, temperature, dissolved oxygen, and depth. Similarly, most HMS gears are not expected to impact other fisheries' EFH, with the possible exception of shark bottom longline gear, depending on the area where it is fished. Bottom longline gear is one of the only gear types that could have a detrimental effect on the benthic environment, especially if placed in coral reef, hard bottom or submerged aquatic vegetation habitats.

Because this action also would not significantly alter fishing gears or practices, it is anticipated that it would not have any adverse impacts to EFH, and the conclusion for the Consolidated HMS FMP is still applicable, so further consultation is not necessary.

4.5 Impacts on Protected Species

On September 7, 2000, NMFS reinitiated formal consultation for all HMS commercial fisheries under Section 7 of the ESA. A BiOp issued June 14, 2001, concluded that continued operation of the Atlantic PLL fishery is likely to jeopardize the continued existence of endangered and threatened sea turtle species under NMFS jurisdiction. This BiOp also concluded that the continued operation of the purse seine and handgear fisheries may adversely affect, but are not likely to jeopardize, the continued existence of any endangered or threatened species under NMFS jurisdiction. NMFS has implemented the reasonable and prudent alternatives (RPAs) required by this BiOp. A new BiOp on the Atlantic PLL fishery was issued on June 1, 2004, but is not relevant to this action, which involves only the handgear fisheries.

Section 3.9.9.1 of the Consolidated HMS FMP lists the 22 marine mammal species that are or could be of concern with respect to potential interactions with HMS fisheries. Section 3.9.9.2 discusses interactions and the ESA, including six endangered whale species. A summary of marine mammal interactions in the PLL fishery from 1992 through 2005 is provided in Section 3.4.1.2 of the Consolidated HMS FMP and in the 2008 SAFE Report. On May 19, 2009 (74 FR 23349), the Office of Protected Resources published a final rule intended to reduce takes of pilot whales and Risso's dolphins Atlantic PLL fishery.

The preferred alternatives in this action are not expected to alter current fishing practices or increase fishing effort significantly, would not be expected to change previously analyzed endangered species or marine mammal interaction rates or magnitudes, or substantially alter bycatch mortality

rates. Therefore, the preferred alternatives in this Draft EA/RIR/IRFA should not have adverse impacts on protected species, or have any further impacts on endangered species, marine mammals, or critical habitat beyond those considered in the 2001 and 2004 BiOps and in the Consolidated HMS FMP. Thus, no further consultation is necessary.

4.6 Environmental Justice Concerns

Executive Order (E.O.) 12898 requires that Federal agencies address environmental justice in the decision making process. In particular, the environmental effects of Federal actions should not have a disproportionate effect on minority and low income communities. The proposed action would not have any effects on human health nor is it expected to have any disproportionate social or economic effects on minority and low income communities. Any social or economic impacts are expected to be positive, and are anticipated to affect the fishing communities equally. This is anticipated because the proposed action would provide additional fishing opportunities to harvest established fishing quotas.

4.7 Coastal Zone Management Act (CZMA) Concerns

NMFS has determined that the proposed action is consistent to the maximum extent practicable with the enforceable policies of those coastal states in the Atlantic, Gulf of Mexico, and Caribbean that have approved coastal zone management programs. Letters will be sent to those states requesting their concurrence.

4.8 Comparison of Alternatives

Table 3 summarizes the determinations made above regarding ecological, social and economic impacts of all the various alternatives, organized and subdivided by issue. A brief summary of the legal and administrative issues is also provided. As set forth above, no Environmental Justice (EJ) or CZMA issues were identified.

4.9 Cumulative Impacts

Since 1999, management actions pertaining to BFT have had minor positive ecological impacts by continuing to limit BFT mortality by U.S. fishermen in accordance with the strict quota limits set by ICCAT. The 1999 FMP adopted ICCAT's 20-year stock rebuilding program for western Atlantic BFT, which includes, among other things, authority for NMFS to implement ICCAT's BFT quota allocation on a yearly basis through a framework procedure. The FEIS for the Consolidated HMS FMP (NMFS 2006) concluded that the cumulative long-term impact of the final implementing actions, including the ICCAT BFT rebuilding program and annual quota allocation process, would be to establish sustainable fisheries for Atlantic HMS.

The cumulative impacts of increasing the General category maximum daily retention limit, allowing the full General category January subquota to be reached, and increasing the Harpoon category daily incidental retention limit are expected to be minimal. These proposed regulatory

changes would be consistent with the Consolidated HMS FMP and with rulemaking completed in 2003 to address aspects of the General and Harpoon category fisheries, in particular extending the General category through January and increasing the daily incidental retention limit for the Harpoon category (68 FR 74504, December 24, 2003), and are expected to have positive social and economic impacts. Existing regulations, such as commercial fish size limits, would continue to be in effect. Economic benefits may be realized through continued, and possibly increased, harvest of BFT.

ICCAT is scheduled to review the status of Atlantic BFT stocks during the first half of 2010 and to renegotiate the western Atlantic BFT TAC at the November 2010 ICCAT meeting. The 2010 stock assessment may result in recommended changes to the ICCAT BFT rebuilding program in the foreseeable future, which may require future domestic rulemaking. Any future domestic actions taken in regard to the BFT fishery would remain within the scope of ICCAT recommendations and established BFT TACs, and consistent with the Magnuson-Stevens Act and ATCA. Efforts are underway to determine the appropriateness of including BFT in a discussion of species to be listed under the Convention on International Trade in Endangered Species.

NMFS' goal for HMS management has been to create ecologically sustainable harvest levels that provide the greatest economic benefits to the largest number of individuals. While certain actions have resulted in negative socioeconomic impacts, all of the past, present, and reasonably foreseeable future actions are expected to ensure the long-term ecological sustainability and continued economic viability of U.S. Atlantic HMS fisheries consistent with applicable law. Thus, NMFS considers that this action is consistent with past and current actions, and anticipates that it also would be consistent with future actions with no substantial adverse, cumulative impacts on the environment from the proposed measures.

5.0 MITIGATION AND UNAVOIDABLE ADVERSE IMPACT

5.1 Mitigating Measures

The preferred alternatives are not likely to have significant long-term adverse ecological or socioeconomic impacts, and no additional mitigation measures were identified nor considered necessary associated with the General category preferred alternatives A2 and B2 and the Harpoon category preferred alternatives C2. The preferred alternatives are designed to provide additional opportunities for fishermen to harvest Atlantic tunas within quotas, size limits, or other established limitations. Handgear has been and continues to be used in the commercial BFT fisheries; therefore, large increases in tuna landings are not expected with these gears. The characteristics of handgear catch and the possibility of increased harvest of BFT is discussed in more detail in Chapter 4. Using its inseason management authority, NMFS will be able to monitor and make adjustments to the General category fishery close to “real time.” Since NMFS will continue to monitor the commercial fishery, any unpredicted increase in effort and landings of BFT, should they occur, could be addressed within a fishing season.

5.2 Unavoidable Adverse Impacts

The action would be consistent with the ICCAT BFT rebuilding program, the Consolidated HMS FMP, ATCA, and the Magnuson-Stevens Act. Although there is a potential for increased BFT landings under Alternatives A2, B2, and C2, landings will continue to be constrained by the established General and Harpoon category quotas. NMFS does not expect a significant change in current fishing patterns or an increase in fishing effort as compared to current levels. The proposed action would not alter current impacts on threatened or endangered species which have been previously analyzed in the 2001 and 2004 BiOps, and thus would not be expected to change previously analyzed endangered species or marine mammal interaction rates or magnitudes, or substantially alter current fishing practices or bycatch mortality rates. Therefore, no unavoidable adverse impacts are expected to result from the proposed action.

5.3 Irreversible and Irretrievable Commitment of Resources

No irreversible or irretrievable commitments of resources are expected from this proposed rule.

6.0 ECONOMIC EVALUATION

Note that all dollars are reported in nominal dollars, consistent with methods used in the Consolidated HMS FMP.

6.1 Prices and Markets

Over the past two and a half decades, the ex-vessel average price of BFT in the United States has increased substantially, from roughly \$0.20 per pound up to nearly \$9.00 per pound round weight in the late 1990s. This increase over time is largely attributed to increased demand for fresh BFT in Japan, the principal consumer of U.S. BFT. The role of the Japanese market, and of quality and market structure considerations in the determination of BFT prices, is discussed in great detail in the Consolidated HMS FMP and is not repeated here. Many factors, including the yen/dollar exchange rate, market supply and demand, and fish quality may affect ex-vessel prices. Table 7 gives the average ex-vessel price of BFT per year for each category.

Ex-vessel prices (nominal values) per category have fluctuated over the last several years. Accounting for inflation, preliminary average ex-vessel prices for BFT in 2008 were higher for the General and Harpoon quota categories relative to prices during 2007. Prices are influenced by the appreciation of the dollar relative to the yen over the last several years (until 2008), as well as market supply conditions in Japan and consumer demand. In addition, the rapid growth of the Mediterranean BFT farming industry may influence prices, with over-supply of the market leading to reduced ex-vessel prices for U.S. fishermen.

6.2 Ex-vessel Gross Revenues

Ex-vessel gross revenues (nominal values) from recorded sales of BFT in all commercial categories for the last 13 years are presented in Table 9. Revenues for the General and Harpoon quota categories in 2008 were 75 and 95 percent higher, respectively, than in 2007, but were still very low compared to most of the time series. Total revenues are the third lowest in the time series, but higher than the two prior years. The combination of stable or reduced ex-vessel prices (Table 7) and reduced commercial landings (Table 5) had a severe impact on ex-vessel gross revenues in 2006 and 2007, but increased overall ex-vessel prices and landings, particularly in the General category, led to a modest total increase in ex-vessel gross revenues in 2008. All categories have generally shown declines since 2001, with the exception of the incidental Longline category.

Before drawing conclusions on trends in gross revenues, it should be emphasized that this discussion focuses on gross revenues only, and not net revenues. Currently, only selected Longline category vessels are required to report cost-earnings data. Given the lack of cost information, it is difficult to draw conclusions concerning net revenues (or profits) to BFT fishermen. Individual vessels may have experienced an increase in net revenue even with lower gross revenues reported for their fishing category. For example, an owner may have been forced to perform major repairs on a vessel in 2008, or could have landed fish in a month when market conditions were relatively poor. Thus, trends in gross revenues can only indicate the average trends in gross income and the effect on

fishermen's net revenues if their costs remained relatively steady over the period examined. The Consolidated HMS FMP highlights the need for further social and economic studies of HMS industries and fishing communities to assist in the calculation of adequate cost information. The more frequently and thoroughly this can be conducted, the better the estimates of the current net revenues.

In a common property fishery, commercial fishermen individually act to maximize profits. Without clearly defined and enforceable property rights for fish in the sea, fishing effort levels expand until the rents (net revenue in excess of a normal return) generated by the fishery are dissipated. That is, fishermen enter the fishery until the last fisherman is just earning a normal return. This open-access equilibrium results in excess fishing effort directed at the fish stock. Stock sizes may well decline below the optimal level, and biological as well as economic overfishing may occur.

The imposition of a TAC may maintain harvest at levels below that which is ecologically sustainable by the BFT stock. If the TAC is designed to rebuild the stock and is not exceeded, the stock size should increase. This increase in stock size generally causes catch per unit effort to increase. Total net revenues in the fishery increase and positive economic rents are generated. Without limited access, these rents will attract new entrants and the length of the fishing season will decline. In short, a race for fish or "derby" is continued. In the derby fishery, the most productive gear types will harvest the greater percentage of the TAC. For BFT, setting quotas by gear type eliminates the cross-gear race for the fish, although derby fishing conditions continue within the gear category.

Even if stocks improve as a result of restrictive quotas and rebuilding programs, derby fishery conditions continue. Society bears the costs of increased capital investment in the BFT fishery, increased idle capacity, and possibly a poorer quality product. In addition, short run supply overages in local markets can result in declines in ex-vessel price as dealers reach the limits of their storage capacity. Also, in the case of BFT which receives higher prices when marketed fresh on the Japanese market, further declines in ex-vessel prices may result because fresh inventory cannot be diverted to a frozen market without decreases in quality and price. To the extent that dealers might have to handle sudden increases in supply due to seasonal availability of BFT, processors may have to invest in refrigeration equipment to store supplies until markets can absorb the excess. After the season ends, this excess storage capacity may remain unused. Processors may also have to hire additional laborers during the season who are laid off after the landings season ends. This seasonal employment may have to be augmented by unemployment compensation and social welfare programs. However, insufficient information exists with which to estimate the magnitude of this problem.

Alternative management measures could improve net benefits in the BFT fishery. A control date was implemented on September 1, 1994, and limited access workshops were commenced to consider management regulations that create quasi-property rights in the fishery. The 1996 final rule established freely transferable purse seine quota, in whole or in part, among the seiners. Future amendments to the Consolidated HMS FMP may consider limited access privilege programs (LAPPs) for HMS fisheries. Even without modifications to the BFT permitting program, restrictive quotas set

internationally by ICCAT, as part of the ICCAT Rebuilding Program, should conserve the BFT stock and allow for its recovery.

6.3 Angling and Charter Boat Revenues

NMFS has taken several steps to define and distinguish commercial, recreational, and charter/headboat fishermen. In 1992, a final rule prohibited the sale of BFT under 73 inches (57 FR 32905, July 24, 1992). A separate rulemaking (62 FR 30741, June 5, 1997) prohibited persons aboard vessels permitted in the General category from retaining BFT less than the large medium size class. Until 2002, anglers in the General category were allowed to land and sell a BFT 73 inches or above and recreationally fish on other HMS species. In fact, the large number of permit holders in the General category used to be explained by the purchase of permits by recreational anglers "in case" they land a commercial size BFT. However, in December 2002, a final rule required recreational vessels that do not sell their catch to obtain an HMS Angling category permit (67 FR 77434, December 18, 2002). A minor exemption was made in a final rule published on December 24, 2003 (68 FR 74504), which allows vessels that are permitted in the General category to participate in recreational HMS fisheries, so long as they are a participant in a registered HMS tournament, thus acknowledging their historical participation in HMS tournaments. These actions effectively separated the commercial and recreational fisheries and left the HMS Charter/Headboat category as the one permit under which both recreational and commercial HMS activities could take place, at any time, given the inherent dual nature of charter/headboat vessel operations. The same final rule that separated the commercial and recreational handgear operations in the tuna fishery also clarified and defined when HMS charter/headboat operations would be considered to be fishing under commercial and/or recreational regulations.

Given the prohibition on the sale of BFT under 73 inches in length, any direct income associated with the Angling category is limited to charter/headboat vessel operations. As with the commercial fishing categories, the ideal analysis would include calculation of costs and revenues to charter vessels such that producer surplus could be estimated. The economic importance of the recreational fisheries for Atlantic tunas is not limited to charter vessel producer surplus, however, nor does it necessarily depend upon the value of the landings which are sold, but rather the participants' willingness to pay for recreational fishing. These non-market values are difficult to estimate, and are collected via either direct questioning (contingent valuation) or indirect survey techniques such as the travel cost method, as a basis for estimating demand (and thus consumer surplus) for recreational fishing.

Indirect income is also an important factor in understanding the economic impact of recreational fisheries to regional economies. This type of income could include shoreside facilities, marinas, gas, and fishing tackle expenditures. The economic value of the recreational Atlantic tuna fisheries, including non-market benefits, should thus be kept in mind when examining the gross revenue figures from other categories, despite the difficulty in attaching a dollar value to recreational fisheries.

The 1999 FMP estimated that in 1997 there were approximately 6,612 charterboat trips targeting BFT from Maine to North Carolina. Of these trips, 2,527 targeted commercial-sized BFT. A survey of daily charter rates advertised by Atlantic HMS Charter/Headboat permit holders which was included in the Consolidated HMS FMP estimated that the average rate for an all day trip in 2004 was \$1,053. Assuming that the total number of trips in 2004 were the same as 1997, and applying the 2004 average to the total number of trips from 1997 results in a rough estimate of gross revenues for BFT charters in 2004 of about \$7.0 million. These estimated direct revenues exceeded the total gross revenues of all other commercial BFT categories combined for 2005 through 2008 (Table 9), and could be an underestimate of revenues accruing to charterboats because some of the BFT landed are probably sold (only large mediums and giants after the 1992 rule). Additionally, tips which are typically given to the mate (about \$100 per trip) are not included. The producer surplus component of the value of the recreational fishery would thus be these gross revenues minus costs incurred in providing the charterboat services. Charter/headboat cost information has not been updated since preparation of the 1999 FMP, in which variable costs were estimated at \$392 per trip. Producer surplus for operations targeting BFT was estimated at \$408 per trip (\$800 - \$392).

According to the 1999 FMP, preliminary estimates of angler consumer surplus in the private BFT fishery were \$1,132 per fishing trip. It should be emphasized that these net revenues would be only a part of the value of the recreational fishery, since angler consumer surplus is another important component as well. Angler consumer surplus is generated from charter/headboat vessel services as well as from private vessel participation in the recreational fisheries.

6.4 Bluefin Tuna Fishery Participation

A complete description of participation rates in the BFT fishery is provided in the Consolidated HMS FMP and the 2008 SAFE Report and is not repeated here. However, Table 6 provides a summary of patterns of fishing activities and Table 4 indicates the number of vessels permitted during the 2008 fishing season, by category, to participate in the BFT fishery.

6.5 Bluefin Tuna Processing and Export

The Consolidated HMS FMP and the 2008 SAFE Report include a detailed discussion regarding the export, import, and re-export trade program and market for BFT. As noted above, over the last 6 years, total landings of BFT have generally declined, U.S. ex-vessel prices have fluctuated, and ex-vessel gross revenues generally have declined. Although the proportion of BFT exported has shown a decreasing pattern since 1996, the majority of domestically harvested BFT was exported until 2006. The reduction in amount of exports and decrease in the ex-vessel value of landings since 2003 indicates a corresponding decrease in the value of exports, although these figures are not available for only Atlantic product. In 2006 and 2007, the majority of U.S. landings entered domestic markets, but in 2008, the majority of U.S. landings was once again exported. According to the Northeast Region BFT Landings Database, of the 266 mt dressed weight (dw) of commercial BFT harvested domestically in calendar year 2008, 146 mt dw (55 percent) were exported and 120 mt dw (45 percent) were sold on the U.S. market. During the same period, the United States imported

approximately 350 mt (shipped weight) of BFT harvested in the Atlantic Ocean, including the Mediterranean and Gulf of Mexico.

6.6 Expected Economic Impacts of the Alternatives

General category maximum daily retention limit

The economic value of effort controls are difficult to quantify and even more difficult to predict because of the unpredictable nature of fish availability and participant behavior. In addition, the economic value of effort controls may vary depending upon whether the fishery is commercial, recreational, or charter/headboat in nature. Despite the lack of quantitative economic data, particularly for recreational fisheries, effort controls are considered to be generally useful in achieving positive economic benefits for the BFT fishery.

One economic benefit of effort controls which regulate the pace of commercial fishing activity (e.g., for the General category fishery) is to maximize product price by avoiding over-supplying the market. Another benefit could result from focusing fisheries seasonally when BFT are of the best quality. Maximizing these benefits must be balanced with other economic considerations such as providing economic benefits to all regions of the fishery, and the effect of fishing expenses such as gas and dockage fees on net revenues.

For recreational fisheries, economic benefits provided by effort controls include consideration of providing the greatest number of participants sufficient access (temporal and geographic) to the fishery without exceeding available quota. Similar to commercial fisheries, maximizing economic benefits for recreational fisheries in specific areas must be balanced with the consideration of providing economic benefits over the entire regional range of the fishery.

The economics of effort controls for charter/headboat fisheries are a hybrid of those for recreational and commercial fisheries, and include the considerations discussed above. In addition, the ability to plan is an important part of the charter/headboat business, because booking clients for charters may be affected by the ability of a charter/headboat business to advertise assurance of specific effort controls, such as open seasons and adequate retention limits in advance of the fishery. Demand for charter/headboat trips could fall without assurance of adequate retention limits.

Alternative A2 would set the General category maximum daily retention limit at five large medium or giant BFT per vessel. This alternative provides the potential for increased economic impacts by creating additional opportunities to harvest BFT within the General and category quota. If NMFS were to take inseason action to set the General category daily retention limit at five fish per vessel, positive economic benefits would accrue. As described in Section 4.1, to the extent that the potential for two additional fish per vessel per day would allow additional landings (i.e., for vessels that may have been constrained by the current three-fish limit), there would be positive economic impacts for General and Charter/Headboat category participants. At \$6.74/lb round weight (the average ex-vessel price for June through August 2008) and an average fish weight of 504 lb for 2008 General category landings, the estimated value of a BFT landed under the General category quota is

\$3,400. Note that this estimate may be high because price/lb values tend to be lower at the beginning of the summer relative to late summer and fall prices. Average General category monthly prices from 1996 to 2008 are shown in Table 10. If 74 additional fish were taken under Alternative A2 over the 2008 level, the total increase in ex-vessel revenues would be approximately \$250,000.

NMFS would maintain the ability to adjust the daily retention limit with an inseason action, if warranted, during the fishing year. Situations that may warrant an inseason adjustment of daily retention limit include slow landings rates, which could warrant an increase in order to increase gross revenues, or high landings rates which could warrant a reduction in order to reduce oversupplying the market.

General category season

Alternative B2 would allow the General category to remain open at the beginning of the calendar year until the January subquota is determined to be fully harvested. As described in Section 4.2, increases in positive socioeconomic impacts to winter fishery participants would depend on the availability of BFT to the fishery from the beginning of February until the BFT January subquota is reached, and on NMFS' ability to announce adjusted quotas in advance of the January fishery given ICCAT timing constraints. NMFS estimates the value of the unused 5.2 mt of adjusted January 2009 subquota, using the January 2008 average price/lb of \$11.20, at \$128,000.

Harpoon category daily incidental retention limit

Alternative C2 would increase the daily incidental retention limit to four large medium BFT. As described in Section 4.3, increases in positive socioeconomic impacts would depend on availability of large medium BFT to the fishery. At \$6.36/lb round weight (the average ex-vessel price for Harpoon category landings in 2008) and an average fish weight of 359 lb for 2008 Harpoon category landings, the estimated value of a BFT landed under the Harpoon category quota is \$2,300. If 24 additional fish were taken under Alternative C2 over the 2008 level (based on the number of trips that may have been constrained by the current maximum of two large medium BFT), the total increase in ex-vessel revenues would be approximately \$55,000. These value and ex-vessel revenue figures are likely overestimates given that the average weight of large medium BFT would be lower than the average of BFT landed by the Harpoon category. If an average large medium weight of 275 lb is assumed, the estimated value of each fish would be approximately \$1,750 and the increase in ex-vessel revenues described above would be approximately \$42,000

7.0 REGULATORY IMPACT REVIEW

The Regulatory Impact Review (RIR) is conducted to comply with Executive Order 12866 (E.O. 12866) and provides analyses of the economic benefits and costs of each alternative to the nation and the fishery as a whole. Certain elements required in an RIR are also required as part of this environmental assessment (EA). This RIR builds upon the data and analysis presented in Chapters 4 and 6 of this document. The information contained in Section 7.0, taken together with the data and analysis incorporated by reference, comprise the complete RIR.

The requirements for all regulatory actions specified in E.O. 12866 are summarized in the following statement from the order:

In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits should be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nonetheless essential to consider. Further, in choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.

E.O. 12866 further requires Office of Management and Budget review of proposed regulations that are considered to be “significant.” A significant regulatory action is one that is likely to:

- Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, local or tribal governments of communities;
- Create serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- Raise novel legal or policy issues arising out of legal mandates, the president’s priorities, or the principles set forth in this Executive Order.

7.1 Description of the Management Objectives

Please see Section 1 for a full description of the objectives of this rulemaking.

7.2 Description of the Fishery

Please see Section 3 for a description of fishery and environment that could be affected by this rulemaking.

7.3 Statement of the Problem

Please see Section 1 for a description of the problem and need for this rulemaking.

7.4 Description of Each Alternative

Please see Section 2 for a summary of each alternative and Section 4 for a complete description of each alternative and its expected ecological, social, and economic impacts.

7.5 Economic Analysis of Expected Effects of Each Alternative Relative to the Baseline

NMFS does not foresee that the national net benefits and costs would change significantly in the long term as a result of implementation of the proposed action. The total amount of BFT landed and available for sale under the proposed action is expected to provide net positive economic impacts, depending on fish availability. Table 10 indicates the possible net economic benefits and costs of each alternative.

7.6 Conclusion

Under E.O. 12866, a regulation is a "significant regulatory action" if it is likely to: 1) have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; 2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; 3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights, and obligation of recipients thereof; or 4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order. The proposed action described in this draft EA/RIR/IRFA does not meet the above criteria. For example, the economic impacts as reflected in this proposed rule are under the \$100 million threshold. This action raises no novel or legal policy issues as it modifies existing regulations to allow increased opportunities to harvest the existing U.S. quota and General and Harpoon quotas, which have been set consistent with international and domestic law and policy and which have been underharvested in recent years. This action is not expected to result in any inconsistency with other agency actions. Therefore, under E.O. 12866, the proposed action described in this document has been determined to be not significant for the purposes of E.O. 12866. A summary of the expected net economic benefits and costs of each alternative can be found in Table 10.

8.0 INITIAL REGULATORY FLEXIBILITY ANALYSIS

The Initial Regulatory Flexibility Analysis (IRFA) is conducted to comply with the Regulatory Flexibility Act (5 USC 601 et. seq.) and provides a description of the economic impacts of the various alternatives on small entities.

8.1 Description of the Reasons Why Action is Being Considered

See Section 1 for a full description of the reasons why this action is being considered.

8.2 Statement of the Objectives of, and Legal Basis for, the Proposed Rule

See Section 1 for a full description of the objectives and legal basis for the proposed rule.

8.3 Description and Estimate of the Number of Small Entities to Which the Proposed Rule Will Apply

This proposed action would apply to all participants in the Atlantic BFT General and Harpoon category fisheries, all of which are considered small entities, because they either had average annual receipts less than \$4.0 million for fish-harvesting, average annual receipts less than \$6.5 million for charter/party boats, 100 or fewer employees for wholesale dealers, or 500 or fewer employees for seafood processors. These are the Small Business Administration (SBA) size standards for defining a small versus large business entity in this industry. As of December 31, 2008, 9,871 vessels were permitted to land and sell BFT under four commercial BFT quota categories (including charter/headboat vessels), with specifically 4,721 vessels in the General category, 4,827 in the Charter/Headboat category, and 26 in the Harpoon category.

8.4 Description of the Projected Reporting, Record-Keeping, and other Compliance Requirements of the Proposed Rule, Including an Estimate of the Classes of Small Entities which will be Subject to the Requirements of the Report or Record

The proposed action does not contain any new collection of information, reporting, record keeping, or other compliance requirements.

8.5 Identification of all Relevant Federal Rules which may Duplicate, Overlap, or Conflict with the Proposed Rule

This proposed rule must be consistent with a number of international agreements, domestic laws, and other FMPs. These include, but are not limited to, the Magnuson-Stevens Act, the Atlantic Tunas Convention Act, Marine Mammal Protection Act, the Endangered Species Act, the National Environmental Policy Act, the Paperwork Reduction Act, and the Coastal Zone Management Act. NMFS strives to ensure consistency among the regulations with Fishery Management Councils and other relevant agencies. NMFS does not believe that the proposed alternatives would conflict with

any relevant regulations, Federal or otherwise. Once the proposed rule is finalized and made effective, fishermen participating in the affected fisheries must comply with the final rule.

8.6 Description of any Significant Alternatives to the Proposed Rule that Accomplish the Stated Objectives of Applicable Statutes and that Minimize any Significant Economic Impact of the Proposed Rule on Small Entities

One of the requirements of an IRFA is to describe any alternatives to the proposed rule which accomplish the stated objectives and which minimize any significant economic impacts. These impacts are discussed below and in Chapters 4 and 6 of this document. Additionally, the Regulatory Flexibility Act (5 U.S.C. § 603 (c) (1)-(4)) lists four general categories of “significant” alternatives that would assist an agency in the development of significant alternatives. These categories of alternatives are:

- Establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities,
- Clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities,
- Use of performance rather than design standards, and
- Exemptions from coverage of the rule for small entities.

In order to meet the objectives of this proposed rule, consistent with the Magnuson-Stevens Act, ATCA, and the ESA, NMFS cannot establish differing compliance requirements for small entities or exempt small entities from compliance requirements. Thus, there are no alternatives that fall under the first and fourth categories described above. NMFS does not know of any performance or design standards that would satisfy the aforementioned objectives of this rulemaking while, concurrently, complying with the Magnuson-Stevens Act. Thus, there are no alternatives considered under the third category. As described below, NMFS analyzed several different alternatives in this proposed rulemaking and provides rationale for identifying the preferred alternative to achieve the desired objective.

The alternatives considered and analyzed are described below. In 2008, the annual gross revenues from the commercial BFT fishery were approximately \$5.0 million. The commercial quota categories and their 2008 gross revenues are General (\$4.0 million), Harpoon (\$313,781), Purse Seine (\$0), and Longline (\$722,016). The IRFA assumes that each vessel within a category will have similar catch and gross revenues to show the relative impact of the proposed action on vessels.

General category maximum daily retention limit

Alternative A1, the status quo alternative, would maintain the current maximum daily retention limit of three large medium BFT. The status quo alternative could result in negative economic impacts to the extent that the daily retention limit constrains large medium and giant BFT landings. The inability of the General category to land and sell its full allotted quota results in decreased optimum yield.

Alternative A2, an increase in the maximum daily retention limit to five fish per vessel, could have positive economic impacts, if NMFS sets the daily retention limit to five fish via inseason action, due to the increased potential to land additional large medium and giant BFT rather than discarding fish in excess of the current maximum daily retention limit (e.g., if a fourth commercial size BFT is caught in one day). Ex-vessel revenues per trip could increase on average by approximately \$8,500 per active vessel (2 fish x the 2008 average fish weight of 500 lb x \$8.44 General category ex-vessel average price/lb), depending on availability of large medium and giant BFT to the fishery. Allowing a higher maximum daily retention limit could also reduce the trip costs per fish landed, and thus improve profitability of trips when additional fish are available. Alternative A2 is the preferred alternative, as it would increase opportunities for General and Charter/Headboat category vessels to land the General category quota while balancing concerns regarding BFT stock health.

Alternative A3, elimination of the maximum daily retention limit, would have positive economic impacts associated with the increased potential to land all large medium and giant BFT in excess of the current maximum daily retention limit rather than discarding them. Although this alternative would provide the most positive economic impacts, it is not preferred because of the potential negative ecological impact of a relatively large potential increase in BFT mortality, including undersized fish.

General category season

Under Alternative B1, the status quo alternative, the General category season would end on January 31 of each fishing year or when the General category January subquota is harvested, whichever comes first. Under this alternative, NMFS anticipates neutral impacts on General and Charter/Headboat category vessels relative to 2008.

Under preferred Alternative B2, which would allow the General category to remain open until the date NMFS determines that the January subquota (adjusted if applicable) has been met, NMFS anticipates that overall economic impacts of this alternative to the General category and Charter/Headboat BFT fishery as a whole would be neutral since the same overall amount of the General category quota would be landed and the value of the General category quota would not be changed. However, General category fishermen in the southern region (approximately 1,300 vessels) would be positively affected by this alternative as it would allow increased opportunities to land and sell BFT commercially and increased utilization of existing investment in gear and equipment, especially if quota is still available for harvest after January 31.

Under Alternative B3, which would establish a January through December General category season and establish 12 equal monthly General category time periods and subquotas (of 8.3 percent each), resulting impacts would be mixed, but positive overall. Winter fishery participants would benefit from increased opportunities to harvest large medium and giant BFT, if available, during the months of February through March. General category and Charter/Headboat category participants in the New England area, or those participants that pursue BFT in the summer months, might experience some adverse economic impacts due to the shift in quota to the earlier (winter) portion of the season. However, these effects would be mitigated by the effects of the carryforward of unharvested quota from one time period to the next. This is not the preferred alternative at this time as NMFS believes the topic of quota location merits further consideration and analyses.

Harpoon category daily incidental retention limit

Alternative C1, the status quo alternative, would maintain the current incidental daily retention limit of two large medium BFT. The status quo alternative could result in negative economic impacts to the extent that the incidental limit constrains large medium BFT landings. The inability of the Harpoon category to land and sell its full allotted quota results in decreased optimum yield.

Alternative C2, an increase in the incidental daily retention limit to four large medium BFT, would have positive economic impacts associated with the increased potential to land additional large medium BFT rather than discarding fish in excess of the current incidental limit (e.g., if a third large medium is caught while pursuing giant BFT). Ex-vessel revenues per trip could increase, depending on availability of large medium BFT to the fishery. Ex-vessel revenues per trip could increase on average by approximately \$4,600 per active vessel (2 fish x the 2008 average Harpoon category fish weight of 360 lb x \$6.36 Harpoon category ex-vessel average price/lb), depending on availability of large medium BFT to the fishery. Allowing a higher daily incidental retention limit could also reduce the trip costs per fish landed, and thus improve profitability of trips when additional fish are available. Alternative C2 is the preferred alternative as it would increase opportunities for Harpoon category vessels to land the Harpoon category quota while balancing concerns regarding BFT stock health.

Alternative C3, elimination of the incidental limit, would have positive economic impacts associated with the increased potential to land all large medium BFT in excess of the current incidental limit rather than discarding them. Although this alternative would provide the most positive economic impacts, it is not preferred because of the potential negative ecological impact of a relatively large potential increase in large medium BFT mortality.

9.0 COMMUNITY PROFILES

Section 102(2)(a) of the National Environmental Policy Act (NEPA) requires Federal agencies to consider the interactions of natural and human environments by using “a systematic, interdisciplinary approach which will ensure the integrated use of the natural and social sciences...in planning and decision making.” Federal agencies should address the aesthetic, historic, cultural, economic, social, or health effects which may be direct, indirect, or cumulative. The Magnuson-Stevens Act also requires, among other matters, consideration of social impacts. Consideration of the social impacts associated with fishery management measures is a growing concern as fisheries experience variable participation and/or declines in stocks.

Profiles for the following communities were included in Chapter 9 of the Consolidated HMS FMP and updated in the 2008 SAFE Report. These communities are analyzed for social impacts in this action due to the importance of BFT fishing to the community: Gloucester, MA; New Bedford, MA; Barnegat Light and Brielle/Point Pleasant, NJ; Hatteras, NC; Wanchese, NC; and Venice and Dulac, LA.

The action is expected to increase fishing opportunities, with related potential increase in positive economic impacts, within the existing U.S. BFT quota and General and Harpoon category subquotas. Providing the alternatives for consideration would allow increased public participation in the management process.

10.0 OTHER CONSIDERATIONS

10.1 Magnuson-Stevens Act

The analyses in this document are consistent with the National Standards (NS) under the Magnuson-Stevens Act, as amended by the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act, and as set forth in the 50 CFR part 600 NS Guidelines.

This proposed action is consistent with NS 1 in that it would prevent the overfishing of BFT and maintain the western Atlantic BFT rebuilding schedule recommended by ICCAT. Because the proposed action is based on the results of the 2008 ICCAT recommendation and 2008 landings data, it is based on the best scientific information available (NS 2), including stock assessment data which provide for the management of these species throughout their ranges (NS 3).

This proposed action does not discriminate against fishermen in any state (NS 4) nor does it alter the efficiency in utilizing the resource (NS 5). With regard to NS 6, the proposed action takes into account any variations that may occur in the fishery and the fishery resources. Additionally, NMFS considered the costs and benefits of these management measures economically and socially under NSs 7 and 8 in Sections 4, 5, and 6 of this document. The proposed action would minimize BFT bycatch to the extent practicable by reducing dead discards (NS 9). Finally, the proposed action would not require fishermen to fish in an unsafe manner (NS 10).

10.2 Paperwork Reduction Act

The proposed quota specifications and effort controls contain no new collection-of-information requirements subject to the Paperwork Reduction Act.

10.3 E. O. 13132

This action does not contain regulatory provisions with federalism implications sufficient to warrant preparation of a Federalism Assessment under E.O. 13132.

11.0 LIST OF PREPARERS

This EA/RIR/IRFA was prepared by Sarah McLaughlin, Brad McHale, Mark Murray-Brown, Peter Cooper, George Silva, and Margo Schulze-Haugen from the HMS Management Division, Office of Sustainable Fisheries. Please contact the HMS Management Division, Northeast Regional Office, for a complete copy of current regulations for the Atlantic tunas fisheries.

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12.0 LIST OF AGENCIES AND PERSONS CONSULTED

Discussions relevant to the formulation of the preferred alternatives/proposed action and the analyses for this draft EA/RIR/IRFA involved input from several NMFS components and constituent groups, including: NMFS Southeast Fisheries Science Center, NMFS Northeast Regional Office, NMFS Office for Law Enforcement, NMFS Office of Science and Technology, and the members of the HMS AP (which includes representatives from the commercial and recreational fishing industries, environmental and academic organizations, state representatives, and fishery management councils). NMFS also has received numerous comments from individual fishermen and interested parties.

13.0 REFERENCES

- NMFS. 1999. Fishery Management Plan for Atlantic Tunas, Swordfish, and Sharks. Highly Migratory Species Management Division, Silver Spring, MD.
- NMFS. 2004. Final Supplemental Environmental Impact Statement for a Final Rule to Implement Management Measures to Reduce Bycatch and Bycatch Mortality of Atlantic Sea Turtles in the Atlantic Pelagic Longline Fishery. June 1, 2004.
- NMFS. 2006. Final Consolidated Atlantic HMS FMP. HMS Management Division, NMFS, Silver Spring, MD.
- NMFS. 2008. Stock Assessment and Fishery Evaluation (SAFE) Report for Atlantic HMS Species. HMS Management Division, NMFS, Silver Spring, MD.
- NMFS. 2009a. Final Environmental Assessment, Regulatory Impact Review, and Final Regulatory Flexibility Analysis for a Final Rule to Establish Atlantic Bluefin Tuna Quota Specifications and Effort Controls for the 2009 Fishing Year, HMS Management Division, National Marine Fisheries Service, Silver Spring, MD.
- NMFS. 2009b. Final Environmental Impact Statement Amendment 1 of the Consolidated HMS FMP, HMS Management Division, National Marine Fisheries Service, Silver Spring, MD.
- SCRS. 2008. Report on the Standing Committee on Research and Statistics, ICCAT Standing Committee on Research and Statistics, September 29-October 3, 2008.

14.0 TABLES AND FIGURES

Table 1. Atlantic Bluefin Tuna Final Quota Specifications (in metric tons) for the 2009 Fishing Year (January 1-December 31, 2009)

Category (% share of baseline quota)	Baseline Allocation	Dead Discard Deduction	Adjustment to Baseline Quota ¹	Final 2009 Fishing Year Quota
Angling (19.7)	199.0 SUBQUOTAS: School 103.5 Reserve 19.1 North 39.8 South 44.5 Lg. Sch/Sm. Med 90.9 North 42.9 South 48.0 Trophy 4.6 North 1.5 South 3.1		61.6	260.6 SUBQUOTAS: School 103.5 Reserve 19.1 North 39.8 South 44.5 Lg. Sch/Sm. Med 151.1 North 71.3 South 79.8 Trophy 6.0 North 2.0 South 4.0
General (47.1)	Total: 475.7 SUBQUOTAS: Jan 25.2 Jun-Aug 237.8 Sept 126.1 Oct-Nov 61.8 Dec 24.7		147.4	623.1 SUBQUOTAS: Jan 33.0 Jun-Aug 311.5 Sept 165.1 Oct-Nov 81.0 Dec 32.4
Harpoon (3.9)	39.4		12.2	51.6
Purse Seine (18.6)	187.8		58.2	246.0
Longline (8.1)	81.8 SUBQUOTAS: North (-NED) 32.7 NED 25.0 ³ South 49.1	-90.0	82.5 ²	74.3 SUBQUOTAS: North (-NED) 29.7 NED 25.0 ³ South 44.6
Trap (0.1)	1.0		0.3	1.3
Reserve (2.5)	25.2		155.2 ⁴	180.4
Total (100)⁵	1,009.9	-90.0	517.5	1,437.4

(1) The distribution of 517.5 mt of underharvest (per ICCAT recommendation) to the quota categories is consistent with FMP allocations, after considerations as calculated below for the Longline category and the Reserve.

(2) Adjustment to Longline category quota is intended to provide sufficient quota for the 2009 fishing year.

Longline category quota=81.8-90.0+82.5=74.3. Dead discard deduction consistent with § 635.27(a)(10).

(3) 25 mt to account for bycatch of BFT in directed longline fisheries in the NED. Not included in total baseline allocation, which is allocated according to the category percentages contained in the Consolidated HMS FMP.

(4) Allocation of 15% of the U.S. quota (155.2 mt) to the Reserve for potential ICCAT transfer and other domestic management objectives.

(5) Totals are subject to rounding error.

Table 2. Atlantic Bluefin Tuna Adjusted Quotas and Landings (metric tons) by Category for the 2008 Fishing Year (January 1- December 31, 2008) as of January 13, 2009.

Category	Adjusted Quota	Landings
General	740	230
Harpoon	61.2	22
Longline	72.3	82
Trap	1.6	2
Purse Seine	292.2	0
Angling	309.5	437
Total	1476.8	773

2008 Fishing year landings figures (calculated as of January 13, 2009) are preliminary and subject to change. For the Angling category, landings were estimated using revised preliminary LPS information, reported trophy BFT landings, and North Carolina tagging program information. Commercial landings information is from the NERO dealer report database.

Table 3: Comparison of Impacts of Alternatives

Alternative	Ecological Impacts on BFT	Ecological Impacts on other fish species	Protected Species	Economic Impacts	Social Impacts	Administrative/ Legal/EJ/CZMA Considerations
Issue 1: GENERAL CATEGORY MAXIMUM DAILY RETENTION LIMIT						
A1. No Action. Maintain maximum daily retention limit of three large medium or giant BFT.	Neutral. No significant change in fishing patterns or increase in effort	Neutral. No significant change in fishing patterns or increase in effort	Neutral. No significant change in fishing patterns or increase in effort	Neutral. Continued unused quota.	Neutral. No changes in the fishery are expected.	
A2. Increase maximum daily retention limit to five large medium or giant BFT (PREFERRED)	Slightly negative. BFT fishing effort and mortality may increase slightly.	Slightly negative. Increases in BFT effort may increase bycatch mortality, but gear is highly selective.	Slightly negative. Increases in BFT effort may increase protect species interactions, but gear is highly selective.	Positive. Would allow greater access to BFT and turn some discards into landings. Revenue increase would depend on BFT availability to the fishery.	Positive. Would allow greater access to BFT and turn some discards into landings.	Daily retention limit can be increased or decreased using inseason action(s), if necessary.
A3. Eliminate maximum daily retention limit for large medium and giant BFT.	Negative. BFT fishing effort and mortality may increase	Slightly negative. Increases in BFT effort may increase bycatch mortality, but gear is highly selective.	Slightly negative. Increases in BFT effort may increase protect species interactions, but gear is highly selective.	More positive than A2. Would allow greater access to BFT and turn discards into landings. Revenue increase would depend on BFT availability to the fishery.	More positive than A2. Would allow greater access to BFT and turn discards into landings.	Would provide NMFS greatest flexibility in setting daily retention limit. Daily retention limit can be increased or decreased using inseason action(s), if necessary.
A4. Allow daily retention limit to apply for each day of a multi-day trip.	Not analyzed	Not analyzed	Not analyzed	Not analyzed	Not analyzed	Not analyzed
Issue 2: GENERAL CATEGORY SEASON						
B1. No Action: Maintain current General category season.	Neutral. No significant change in fishing patterns or increase in effort.	Neutral. No significant change in fishing patterns or increase in effort.	Neutral. No significant change in fishing patterns or increase in effort.	Neutral. Continued unused quota.	Neutral. No changes in the fishery are expected.	
B2. Leave the General category open until the January subquota is determined to be fully harvested. (PREFERRED)	Neutral. BFT mortality levels would stay consistent with levels used in the stock assessment.	Neutral. Slight to moderate changes (spatial and temporal) in BFT effort may increase bycatch mortality, but gear is highly selective.	Neutral. Slight changes (spatial and temporal) in BFT effort may increase protected species interactions, but gear is highly selective	More positive than B1 (could increase gross revenues), particularly for winter fishery participants.	More positive than B1 because of economic impacts, particularly for winter fishery participants.	

B3. Establish a year-round General category season and equal monthly subquotas.	Neutral. BFT mortality levels would stay consistent with levels used in the stock assessment.	Neutral. Changes (spatial and temporal) in BFT effort may increase bycatch mortality, but gear is highly selective	Neutral. Changes (spatial and temporal) in BFT effort may increase protected species interactions, but gear is highly selective	Mixed. More positive than B2 for winter fishery participants (most likely to increase gross revenues). Negative for northern area participants (most likely to decrease gross revenues), but mitigated by unused quota rolling forward to later periods of fishing year.	Mixed. More positive than B1 for winter participants because of economic impacts. Negative for northern area participants because of economic impacts. Positive in that would provide some stability to the constituency by establishing a known amount of quota that would be available at the first of each month.	Merits further consideration and analysis, particularly regarding quota reallocation.
Issue 3: HARPOON CATEGORY DAILY INCIDENTAL RETENTION LIMIT						
C1. No Action: Maintain current Harpoon category daily incidental retention limit of two large medium BFT.	Neutral to negative, depending on availability of large medium BFT to fishery.	Neutral.	Neutral.	Neutral. No changes in revenues are expected.		
C2. Increase the Harpoon category daily incidental retention limit to four large medium BFT. (PREFERRED)	Neutral if convert discards to landings. Slightly negative due to potential increase in bycatch mortality of small medium BFT and BFT in excess of incidental limit.	Minimal. Gear highly selective.	Neutral.	Positive (could increase gross revenues)	Positive because of economic impacts.	
C3. Eliminate the Harpoon category daily incidental retention limit.	More negative than C2 due to increased mortality of large medium BFT and potential bycatch mortality of small medium BFT.	Minimal. Gear highly selective.	Neutral.	More positive than C2.	More positive than C2.. Negative socioeconomic impacts could result for few vessels that may not participate early in the Harpoon category season.	

Table 4: 2007/2008 Atlantic HMS and Atlantic tunas permits as of December 31, 2008.

Category	Number of Permits
General	4,721
Harpoon	26
Purse Seine	5
Incidental Longline/Trap	292
HMS Angling (Recreational)	32,938
HMS Charter/Headboat	4,827
Total	42,809

Due to the change to a calendar year fishing year that started on January 1, 2008, permits issued for the 2007 fishing year (June 1 –December 31, 2007) were effective through December 31, 2008.

Data Source: Atlantic HMS/Tunas Permit Database

Table 5: BFT landings (metric tons) by year and category, 1996 to 2008 (2008 fishing year landings as of January 13, 2009).

Category	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
General	575	679	706	714	725	933	898	595	344	234	160	122	230
Harpoon	58	53	60	59	53	68	41	53	30	23	22	12	22
Purse Seine	245	250	248	247	275	196	208	265	32	178	4	28	0
No. Longline	21	20	23	17	12	8	8	25	34	29	28	26	48
So. Longline	43	27	24	51	51	28	48	69	58	28	38	9	34
Trap	1	2	1	0	0	0	0	0	0	0	0	0	2
Angling	362	299	184	100	50	241	619	392	355	199	187	507	437
Total	1,305	1,330	1,246	1,188	1,166	1,484	1,822	1,399	853	691	439	704	773

The BFT fishery was managed on a fishing year basis (June through May) versus a calendar year basis (January through December) starting with the implementation of the 1999 FMP in 2000 until January 2008, when management reverted to a calendar year basis. Landings are presented on a calendar year (versus fishing year) basis for 1996 through 1999, and for 2008. The 2007 fishing year was June 1, 2007-December 31, 2007.

2008 Fishing year landings figures (calculated as of January 13, 2009) are preliminary and subject to change. For the Angling category, landings were estimated using revised preliminary LPS information, reported trophy BFT landings, and North Carolina tagging program information. Commercial landings information is from the NERO dealer report database.

Table 6. Summary of patterns of fishing activities directed at BFT in the United States

Gear	Area	Size of fish	Season
Handline, Harpoon, and Rod and Reel	Cape Cod Bay and Gulf of Maine	Giant	<i>June-November</i>
		Medium	<i>August-October</i>
		School	<i>Summer (unpredictable)</i>
	Cape Lookout to Cape Cod	School	<i>June-October</i>
		Medium	<i>June-October</i>
		Large Medium and Giant	<i>December-March</i>
	Gulf of Mexico	Giant	<i>January-June</i>
Purse Seine	Cape Hatteras to Cape Cod	Large Medium and Giant	<i>July-October</i>
	Cape Cod Bay	Large Medium and Giant	<i>July-October</i>

Table 7: Ex-vessel average price (per lb, round weight) for BFT by commercial fishing category, 1996-2008 (2008 fishing year data as of January 13, 2009).

Category	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
General	8.71	7.13	5.01	6.53	8.62	6.78	6.12	5.17	6.77	7.40	7.60	7.82	8.44
Harpoon	7.69	8.06	5.70	8.57	6.42	6.57	5.97	5.88	6.04	5.51	5.45	5.98	6.36
Incidental (Longline/Trap)	4.62	4.90	4.85	5.15	5.36	5.08	4.40	4.52	4.27	3.80	4.84	4.98	4.78
Purse Seine	8.61	8.33	5.78	6.36	6.58	6.17	5.79	4.01	4.73	2.73	4.28	7.31	--

Prices contained in the table reflect calendar year averages. The BFT fishery was managed on a fishing year basis (June through May) versus a calendar year basis (January through December) starting with the implementation of the 1999 FMP in 2000 until January 2008, when management reverted to a calendar year basis. Prices are presented on a calendar year (versus fishing year) basis for 1996 through 1999, and for 2008. The 2007 fishing year was June 1, 2007-December 31, 2007.

Prior to the 2007 BFT specifications, NMFS reported values as converted to 1996 dollars (using the Consumer Price Index Conversion Factors). In this table, all prices are presented as nominal dollars, consistent with methods used in the Consolidated HMS FMP.

There were no Purse Seine landings in 2008.

Data Source: 1996-2008 BFT Dealer Report Database

Table 8: Alternative B1: Gross Revenues associated with the General category season No Action alternative.

Time Period	Percentage	Base Quota Equivalent in mt*	Approx. Equivalent in lb*	Average Ex-Vessel \$ (2008)	Gross Revenues
January	5.3	25.2	55,556	\$11.20	\$622,227
June-Aug	50.0	237.8	524,254	\$6.74	\$3,533,471
September	26.5	126.1	278,000	\$7.96	\$2,212,880
October-November	13.0	61.8	136,244	\$6.97	\$949,621
December	5.2	24.7	54,454	\$14.24	\$775,424
TOTAL	100.0	475.7	1,048,728		\$8,093,623

*Time period allocations may differ slightly due to rounding.

Table 9: Ex-vessel gross revenues in the U.S. Atlantic bluefin tuna fishery by commercial fishing category, 1996-2008 (2008 fishing year data as of January 13, 2009)

Year	General	Harpoon	Incidental (Longline/Trap)	Purse Seine	Total
2008	\$3,975,244	\$313,781	\$722,016	--	\$5,011,041
2007	\$2,259,194	\$160,845	\$807,954	\$451,390	\$3,679,383
2006	\$2,526,052	\$265,951	\$558,022	\$33,819	\$3,383,844
2005	\$3,815,068	\$268,815	\$675,297	\$1,124,305	\$5,883,484
2004	\$5,444,735	\$381,593	\$998,201	\$333,066	\$7,157,595
2003	\$6,027,760	\$658,832	\$691,496	\$2,346,137	\$9,724,224
2002	\$12,199,803	\$518,822	\$486,793	\$2,673,090	\$15,878,508
2001	\$14,070,209	\$964,945	\$398,401	\$2,667,004	\$18,100,558
2000	\$13,686,456	\$751,034	\$731,340	\$3,992,422	\$19,161,253
1999	\$9,858,771	\$1,116,712	\$758,650	\$3,457,119	\$15,191,252
1998	\$7,462,669	\$715,752	\$474,631	\$3,161,708	\$11,814,759
1997	\$10,618,105	\$900,108	\$458,074	\$4,581,837	\$16,558,123
1996	\$10,781,387	\$919,717	\$647,634	\$4,445,852	\$16,794,591

Revenues contained in the table reflect calendar year summaries. The BFT fishery was managed on a fishing year basis (June through May) versus a calendar year basis (January through December) starting with the implementation of the 1999 FMP in 2000 until January 2008, when management reverted to a calendar year basis. Revenues are presented on a calendar year (versus fishing year) basis for 1996 through 1999, and for 2008. The 2007 fishing year was June 1, 2007-December 31, 2007.

Prior to the 2007 BFT specifications, NMFS reported values as converted to 1996 dollars (using the Consumer Price Index Conversion Factors). In this table, all prices are presented as nominal dollars, consistent with methods used in the Consolidated HMS FMP.

There were no Purse Seine landings in 2008.

Data Source: 1996-2008 BFT Dealer Report Database.

Table 10: Summary of expected net economic benefits and costs of alternatives.

Alternative	Net Economic Benefits	Net Economic Costs
Issue 1: GENERAL CATEGORY MAXIMUM DAILY RETENTION LIMIT		
A1. No Action. Maintain maximum daily retention limit of three large medium or giant BFT.	Positive economic impacts on a scale similar to 2008.	Opportunity cost of revenue foregone due to unused quota; would restrain ex-vessel revenues, depending on BFT availability.
A2. Increase maximum daily retention limit to five large medium or giant BFT (PREFERRED)	Positive, by increasing ex-vessel gross revenues.	Potential costs resulting from oversupply of market if catch rates high, absent NMFS action to reduce retention limit.
A3. Eliminate maximum daily retention limit for large medium and giant BFT.	Most positive, by increasing ex-vessel gross revenues.	Highest potential costs resulting from oversupply of market if catch rates high, absent NMFS action to reduce retention limit.
A4. Allow daily retention limit to apply for each day of a multi-day trip.	Not analyzed.	Not analyzed.
Issue 2: GENERAL CATEGORY SEASON		
B1. No Action: Maintain current General category season.	Neutral. Negative economic impacts from unused quota on a scale similar to 2008.	Opportunity cost of revenue foregone due to unused quota; would restrain ex-vessel revenues, depending on BFT availability.
B2. Leave the General category open until the January subquota is determined to be fully harvested. (PREFERRED)	Positive, by increasing ex-vessel gross revenues, particularly for winter fishery participants.	None.
B3. Establish a year-round General category season and equal monthly subquotas.	Most positive winter fishery participants, by increasing ex-vessel gross revenues.	Highest costs for northern area participants due to decreased quota allocations, mitigated by unused quota rolling forward.
Issue 3: HARPOON CATEGORY DAILY INCIDENTAL RETENTION LIMIT		
C1. No Action: Maintain current Harpoon category daily incidental retention limit of two large medium BFT.	Neutral. Negative economic impacts from unused quota on a scale similar to 2008.	Opportunity cost of revenue foregone due to unused quota; would restrain ex-vessel revenues, depending on BFT availability.
C2. Increase the Harpoon category daily incidental retention limit to four large medium BFT. (PREFERRED)	Positive, by increasing ex-vessel gross revenues.	Potential costs resulting from oversupply of market if catch rates high.
C3. Eliminate the Harpoon category daily incidental retention limit.	Most positive, by increasing ex-vessel gross revenues.	Potential costs resulting from oversupply of market if catch rates high Potential costs for a low number of vessels that may not participate early in the Harpoon category season, if season closes early due to quota attainment.

Table 11: Average monthly prices (per lb, round weight) for Atlantic bluefin tuna in the General Category, 1996-2008 (2008 fishing year data as of January 13, 2009).

Year	January	June	July	August	September	October	November	December
2008	\$11.20	\$4.86	\$6.63	\$7.37	\$7.96	\$8.87	\$6.65	\$14.24
2007	\$10.01	\$5.80	\$5.77	\$6.54	\$7.36	\$9.16	\$11.57	\$8.66
2006	\$10.07	\$4.15	\$7.35	\$6.36	\$6.17	\$7.54	\$7.82	\$8.27
2005	\$9.84	\$4.77	\$6.28	\$6.69	\$6.29	\$6.75	\$7.51	\$8.58
2004	\$6.89	\$6.08	\$5.68	\$5.00	\$6.39	\$6.34	\$8.01	\$7.89
2003	--	\$4.36	\$6.62	\$6.66	\$6.13	\$3.96	\$7.15	\$6.15
2002	--	\$5.80	\$6.54	\$6.79	\$4.85	\$6.85	\$4.66	\$6.52
2001	--	\$4.86	\$7.20	\$6.67	\$7.19	\$6.83	\$5.52	--
2000	--	\$8.44	\$11.26	\$8.40	\$8.32	\$7.96	\$8.03	\$10.65
1999	--	\$5.50	\$8.05	\$6.27	\$6.39	\$6.12	--	--
1998	--	\$7.04	\$4.80	\$4.62	\$4.75	\$5.86	\$9.99	--
1997	--	\$7.09	\$6.66	\$7.74	\$7.03	\$8.06	\$7.00	\$2.39
1996	--	\$7.81	\$7.86	\$8.55	\$8.33	\$9.97	\$15.26	--

Prior to the 2007 BFT specifications, NMFS reported values as converted to 1996 dollars (using the Consumer Price Index Conversion Factors). In this table, all prices are presented as nominal dollars, consistent with methods used in the Consolidated HMS FMP.

Data Source: 1996-2008 BFT Dealer Report Database

Figure 1: General category base subquotas (mt, %).

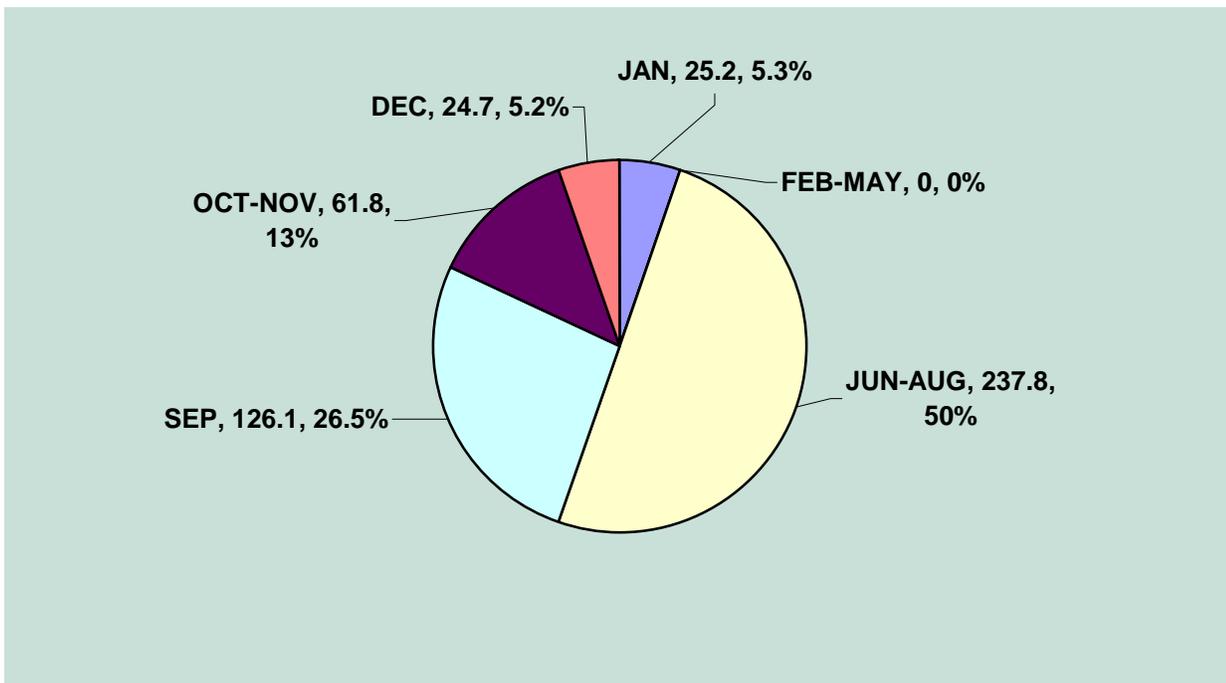
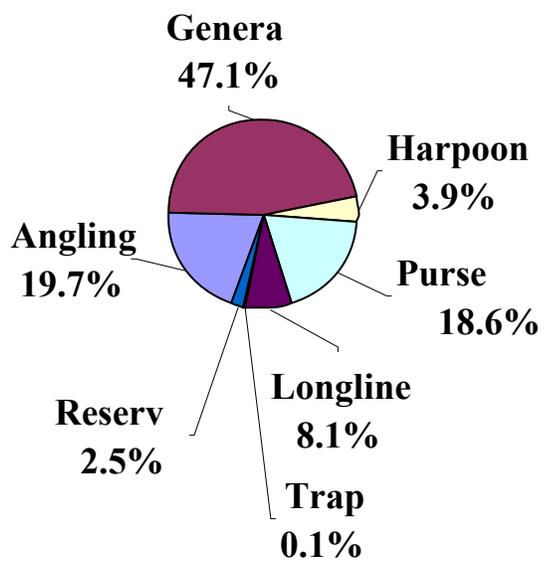


Figure 2: Current Atlantic bluefin tuna quota allocation (%).



Source: 2006 Consolidated HMS FMP

Figure 3: BFT Adjusted Quotas and Landings (mt), 1996-2008.

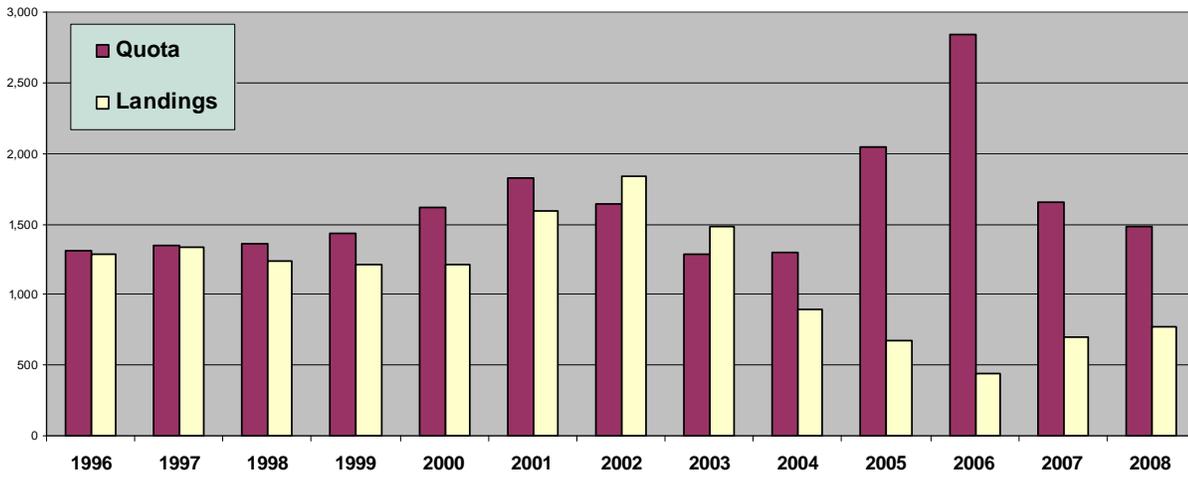


Figure 4: U.S. base quotas, adjusted quotas, and landings (mt) by category, 2001 and 2008.

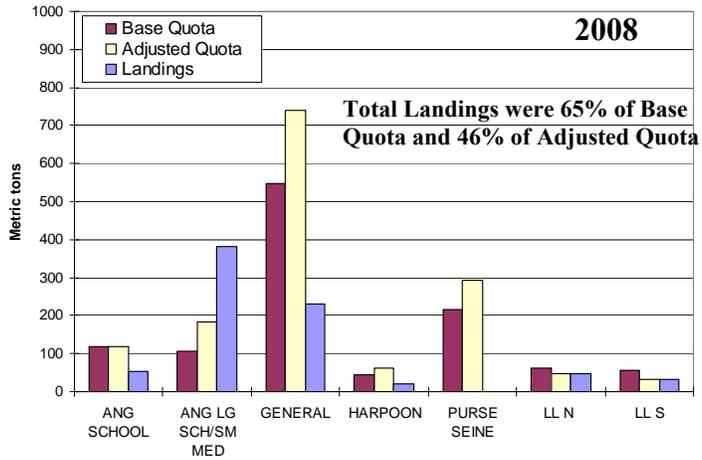
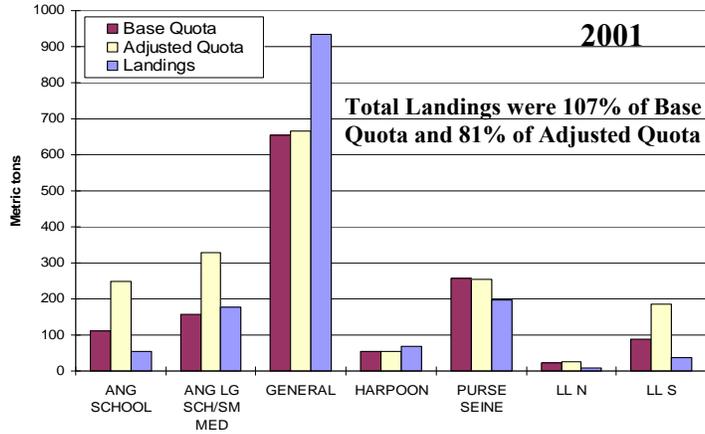


Figure 5: 2008 adjusted General category quota and landings (mt) per quota subperiod.

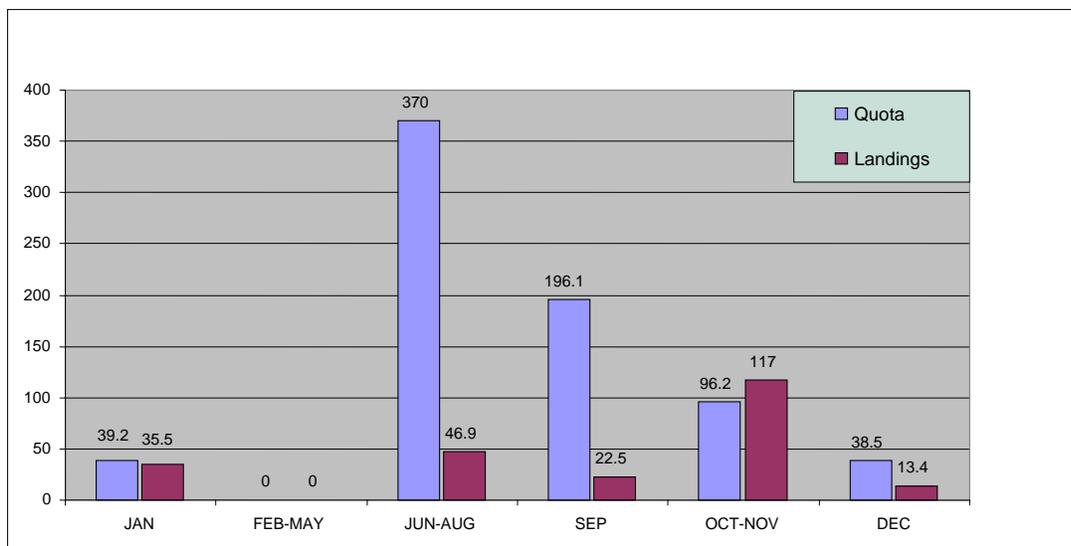


Figure 6: Successful General category trips per quota subperiod and number of BFT per trip (day) for 2008.

