Draft

ENVIRONMENTAL ASSESSMENT

AND

REGULATORY IMPACT REVIEW

FOR A

PROPOSED RULE

TO IMPLEMENT QUOTA RECOMMENDATIONS FROM THE 2000 MEETING OF THE INTERNATIONAL COMMISSION FOR THE CONSERVATION OF ATLANTIC TUNAS

AND

TO RE-ESTABLISH PROHIBITIONS REGARDING POSSESSION OF FISH IN VIOLATION OF INTERNATIONAL REGULATIONS

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

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Proposed Rule to Implement Recommendations from the 2000 Meeting of the International Commission for the Conservation of Atlantic Tunas and to Implement Changes to the North Atlantic Swordfish Quota Management System

Framework Adjustment to the Fishery Management Plan for Atlantic Tunas, Sharks, and Swordfish

Proposed Actions: Establish a conservation reserve quota for North Atlantic swordfish; Transfer quota with the North Atlantic swordfish fishery; Implement trade restrictions for bigeye tuna; Prohibit possession of fish caught in violation of international regulations; Clarify authorized fishing areas for U.S. Atlantic highly migratory species fishermen.

Type of statement: Draft Environmental Assessment and Regulatory Impact Review

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Abstract: The United States is obligated under the Atlantic Tunas Convention Act (ATCA) to implement conservation and management recommendations that have been adopted by the International Commission for the Conservation of Atlantic Tuna (ICCAT). The proposed regulations would establish a conservation reserve quota of 400 mt ww (301 mt dw) of North Atlantic swordfish for the 2001 fishing year, clarify allowable fishing areas for U.S. vessels fishing for highly migratory species in the eastern Atlantic Ocean, establish the status quo South Atlantic swordfish quota for 2001, implement bigeye tuna trade restrictions, and re-establish prohibitions relating to possession of fish taken in violation of international regulations. These actions are necessary to ensure continued progress toward the conservation goals of ICCAT for Atlantic highly migratory species. Short-term economic impacts resulting from any of these actions are expected to be minimal. However, the conservation benefits are likely to be great due to international cooperation and compliance with these ICCAT recommendations.

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1.0 PURPOSE AND NEED FOR ACTION

1.1 Need for Establishing a Conservation Reserve for North Atlantic Swordfish

North Atlantic swordfish are overfished. At its 1999 meeting, ICCAT adopted a recommendation to establish an international rebuilding program for North Atlantic swordfish and to reduce the total allowable catch for all countries fishing on that stock. Although the stock is showing signs of stabilization and some improvement, the Standing Committee on Research and Statistics (SCRS) has warned that the rebuilding program is very sensitive to any overharvests. At the 2000 meeting of ICCAT, it became apparent that Japan had seriously exceeded its North Atlantic swordfish quota for several years in a row, despite efforts to address this problem. Swordfish are a non-target species taken in Japan's bigeye tuna fishery. Japan has exceeded its landings quota for swordfish and has been discarding swordfish for some time. Because of concerns for the integrity of the 10-year swordfish rebuilding program, the United States agreed to assist Japan in addressing its swordfish overharvest. A measure was adopted that, among other things, will allow Japan access to 400 mt ww (301 mt dw) of unused U.S. quota for 2001 only. This quota would be applied to Japan's discards, in order to account for that mortality in the total allowable catch. **Therefore, NMFS proposes to establish a 400 mt (301 mt dw) reserve quota for North Atlantic swordfish.**

1.2 Need for Reinstating Regulations Regarding Possession of Fish Taken in Violation of Existing International Regulations and Recommendations

Regulatory text that existed prior to publication of the HMS FMP and its consolidated implementing regulations prohibited persons and vessels subject to the jurisdiction of the United States from possessing fish taken in violation of ICCAT recommendations or from violating another country's fisheries regulations pertaining to species managed by ICCAT. This provision reflects the intent of the Lacey Act. While those specific prohibitions were included in the initial proposed consolidated HMS regulations (61 FR 57361, November 6, 1996), they were inadvertently excluded when the consolidated regulations were re-proposed to implement the new requirements of the HMS FMP (64 FR 3486, January 20, 1999). Given that the regulatory consolidation was not intended to make substantive changes to existing regulations, other than those specifically noted as necessary to achieve consistency or to implement new requirements of the HMS FMP, the exclusion of those prohibitions was a drafting error and requires correction. **Therefore, NMFS proposes to re-establish prohibitions regarding possession of fish taken in violation of ICCAT recommendations or in violation of another country's regulations.**

1.3 Need for Clarifying Authorized Fishing Areas

At the 2000 ICCAT meeting, the United States received notification from the European Community that a U.S. vessel has been landing Atlantic bluefin tuna caught in the Mediterranean Sea. This fishing activity is not consistent with the terms of the rebuilding program for west Atlantic bluefin tuna, which directs all parties to take measures to prohibit any transfer of fishing effort from the west Atlantic to the east Atlantic. The Mediterranean Sea is considered part of

the east Atlantic stock, and the United States does not have an allocation of east Atlantic bluefin tuna quota. **Therefore, NMFS proposes to clarify authorized fishing areas for U.S. fishermen targeting HMS in the Atlantic Ocean and adjacent seas by prohibiting U.S. vessels from fishing for bluefin tuna in the East Atlantic Ocean.**

1.4 Need for Implementing Trade Restrictions for Atlantic Bigeye Tuna

Bigeye tuna are overfished. At its 2000 meeting, ICCAT recommended trade restrictions be implemented to address the unreported and unregulated catches of tuna by large-scale longline vessels in the Convention Area. The Commission identified Contracting Parties and non-Contracting parties/entities whose large-scale longline vessels have been fishing for tuna in a manner that diminishes the effectiveness of ICCAT measures. Those entities were notified and given the opportunity to rectify the situation. Belize, Cambodia, Equatorial Guinea, Honduras, and St. Vincent and the Grenadines were identified as such entities; they are fishing in the Atlantic Ocean and have bigeye tuna as their primary target. Designation of IUU entities and implementation of these trade restrictions parallels the procedures established in the bluefin tuna and swordfish action plans that ensure the effectiveness of the conservation programs for these species (action plans are available at www.iccat.es). **Therefore, NMFS proposes to ban the import of Atlantic bigeye tuna caught by vessels of Belize, Cambodia, Equatorial Guinea, Honduras, and St. Vincent and the Grenadines.**

1.5 Other Recommendations Adopted by ICCAT in 2000

Several other recommendations adopted at the 2000 ICCAT meeting may not require changes to the regulations, but will be addressed in this document. Regarding south Atlantic swordfish, ICCAT adopted a target TAC for 2001 at last year's level of 14,620 mt ww. Parties agreed to establish unilateral catch limits for 2001, which were submitted to ICCAT in December 2000. The United States informed ICCAT of its intention to stay within its prior annual catch limit of 384 mt ww (289 mt dw). Current regulations specify an annual U.S. quota for the south Atlantic swordfish fishery in accordance with the recommendation adopted by ICCAT in November 2000. **No changes to these regulations are proposed at this time.**

A recommendation was adopted by ICCAT relative to south Atlantic albacore, which establishes a total allowable catch and specifies that countries having caught less than 100 mt of southern albacore per year during 1992-96 are subject to an annual catch limit of 100 mt. This provision applies to the United States, which reported no more than 1 mt in each of the specified reference years. **No changes to the regulations are proposed at this time since the United States does not have a directed fishery for south Atlantic albacore, and annual landings are well below the 100 mt limit.**

At the 2000 ICCAT meeting, a recommendation was adopted to establish a total allowable catch level for North Atlantic albacore. The United States supported this recommendation as the first step toward the development of a rebuilding program for the stock. While effort controls are already in place for this fishery, this was the first catch limit to be set by ICCAT for the North

Atlantic albacore stock. The United States was allocated a landings quota of 607 mt ww for the 2001 fishing year, which is a level consistent with average landings for the United States over the past ten years. This recommendation applies for one year only. Given the minor share of U.S. mortality in this fishery (< 2%), and given that the ICCAT recommendation provides for the adjustment of next year's catch level in the case of overharvest or underharvest, NMFS is not proposing any new regulations for this fishery. The recommendation provides that overages/underage of this annual catch limit should be deducted from or added to the catch limit established for the year 2002 and/or 2003. Once ICCAT establishes a catch limit for 2002 and 2003 (as expected at the November 2001 meeting), NMFS may need to undertake rulemaking to adjust as necessary for any overharvest or underharvest during 2001. **Since average recent harvests of North Atlantic albacore have not exceeded this level, no regulations are proposed at this time.**

At its 2000 meeting, ICCAT also recommended that statistical document programs be developed by January 1, 2002, for bigeye tuna and swordfish in order to track trade of these species. NMFS is exploring options for this issue and will propose a statistical document program for these species in the future, after evaluating discussions at an international technical workshop on monitoring. The program options being considered include a harmonized documentation system for bigeye and bluefin tunas and swordfish, separate documentation programs for each species, or a combined program for bigeye tuna and bluefin tuna and a separate program for swordfish. **No changes to the regulations are proposed at this time**.

Finally in 2000, ICCAT recommended measures to address rebuilding of blue and white marlin stocks. NMFS is currently considering how to implement this recommendation and will address that issue in a separate rulemaking. **No changes to the regulations are proposed at this time.**

1.6 Other Amendments to Existing Regulations

NMFS published a final rule in December 12, 2000 (65 FR 77527) to implement trade restrictions for Atlantic swordfish that were recommended by ICCAT in 1999. NMFS inadvertently omitted the word "Atlantic" in the regulatory text which results in an interpretation of the regulations that is inconsistent with both the preamble to the final rule and the ICCAT recommendation. ICCAT intended that imports of only Atlantic swordfish (not Pacific or Indian) should be prohibited from Belize and Honduras. NMFS also inadvertently applied an incorrect date to the dead discard allowance for 2002. The fishing year begins June 1, 2002. The regulations erroneously state that the North Atlantic swordfish dead discard allowance of 160 mt ww should apply to the fishing year beginning May 1, 2001. **In this rule, NMFS corrects the omission of "Atlantic" and also corrects the dates applied to dead discard allowances of swordfish.**

In addition, NMFS inadvertently omitted a prohibition on the swordfish imports. Prohibitions are a portion of Federal regulations that succinctly summarize the regulations and are utilized often by enforcement personnel. **NMFS corrects that omission in this rulemaking.**

2.0. ECONOMIC CONSIDERATIONS

Before implementing management measures, NMFS must consider the economic impacts in accordance with two pieces of legislation: the Regulatory Flexibility Act and Executive Order 12866 (E.O. 12866). Both the Regulatory Flexibility Act and E.O. 12866 require a description of the need for the action, the management objectives, and a description of the expected economic impacts. They also require an analysis of each alternative, the expected effects, and a description of the reasons why an action is being taken. The main difference between the Regulatory Flexibility Act and E.O. 12866 is the focus of the analysis. While the Regulatory Flexibility Act focuses on individual businesses, E.O. 12866 focuses on the entire fishery.

The analyses required for E.O. 12866 and under the Regulatory Flexibility Act are included in Sections 5.2 and Section 6 of this document, and the economic impacts of the proposed measures are discussed throughout this document. Additional information about the Regulatory Flexibility Act, E.O. 12866, and economic impacts can be found in Chapter 7 of the Fishery Management Plan for Atlantic Tunas, Swordfish, and Sharks (NMFS, 1999).

2.1 Small Business Regulatory Enforcement and Fairness Act

The Small Business Regulatory Enforcement and Fairness Act of 1996 amended the Regulatory Flexibility Act and made compliance with Sections of the Regulatory Flexibility Act subject to judicial review. The purpose of the Regulatory Flexibility Act is to require agencies to assess impacts of their proposed regulations on small entities and to encourage Federal agencies to utilize innovative administrative procedures when dealing with small entities. If an action is believed to have a significant impact on a substantial number of small entities the Regulatory Flexibility Act requires agencies to perform an Initial Regulatory Flexibility Analysis (IRFA) during the proposed rule stage and, after considering public comment, a Final Regulatory Flexibility Analysis (FRFA) during the final rule stage. In a regulatory flexibility analysis, the focus is on small businesses and the effect of regulatory measures on their revenues and/or costs. The analyses should contain sufficient information to make a determination of whether the rule has a “significant economic impact on a substantial number of small entities” under the Regulatory Flexibility Act.

2.2 Executive Order 12866

In compliance with E.O. 12866, the Department of Commerce and NOAA require the preparation of a Regulatory Impact Review (RIR) for all regulatory actions that either implement a new Fishery Management Plan or significantly amend an existing plan, or may be significant in that they reflect agency policy concerns and are of public interest. The RIR is part of the process of preparing and reviewing FMPs and regulatory actions and is intended to provide a comprehensive review of the changes in net economic benefits to society associated with proposed regulatory actions. Thus, the focus of the RIR is on the net economic benefit from the entire fishery, not the net economic benefit from individual fishermen. The analysis also provides a review of the problems and policy objectives prompting the regulatory proposals and an evaluation of the major

alternatives that could be used to solve the problems. The purpose of the analysis is to ensure that the regulatory agency systematically and comprehensively considers all available alternatives so that the public welfare can be enhanced in the most efficient and cost-effective way.

3.0. AFFECTED ENVIRONMENT

3.1 Status of the Target Finfish Stocks

Detailed biological descriptions of species affected by these proposed regulations are provided in the 2001 SAFE Report (NMFS, 2001a) and are not repeated here. That document also provides information on catch and bycatch of HMS by fishery (available on the internet at www.nmfs.gov/sfa/hmspg.html).

North and South Atlantic swordfish, Atlantic bigeye tuna, and North and South Atlantic albacore are considered overfished. South Atlantic swordfish are considered fully fished and overfishing may be occurring. Rebuilding plans are in place for North Atlantic swordfish and bigeye tuna and NMFS is developing rebuilding programs for albacore. In 1999, assessments of the North Atlantic swordfish stock indicated that the decline in stock biomass had been slowed or arrested (SCRS, 1999). The SCRS noted positive signs from the fishery in terms of catch rates, and concluded that the observed high recruitment of age one fish in 1997 and 1998 should allow for increases in spawning stock biomass in the future, if these year classes are not heavily harvested.

3.2 Status of Non-Target Finfish and Protected Species

This rulemaking affects tuna and swordfish longline vessels predominantly. Description of non-target finfish caught in the longline fishery and in other fisheries is discussed in the 2001 SAFE Report (NMFS, 2001a). Wahoo, king mackerel, some species of sharks (some of which are overfished) and rays, and other finfish, are caught incidental to the swordfish and tuna longline operations in the Atlantic Ocean. Many of these species are marketed along with the target catch of swordfish and tunas, however, others are discarded for personal, economic, or regulatory reasons. Additional details on these non-target finfish can be found in the HMS FMP and the EIS for the August 2000 final rule to implement bycatch reduction measures in the Atlantic pelagic longline fishery (NMFS, 1999 and NMFS, 2000). The most recent longline bycatch data are available from the 2000 U.S. National Report to ICCAT.

In accordance with the Marine Mammal Protection Act, NMFS published draft stock assessment reports for Atlantic and Gulf of Mexico marine mammals. The status of endangered mammals and sea turtles taken by the pelagic longline fishery is provided in a new Biological Opinion was issued June 14, 2001, regarding the interaction of the pelagic longline fishery with protected species. Sea bird bycatch and status of stocks is summarized in NMFS, 2001a. Sea turtles, marine mammals, and sea birds are protected by legislation (Magnuson-Stevens Act, Marine Mammal Protection Act, Migratory Bird Act) and many of the individual species are protected

under the Endangered Species Act.

3.3 Fisheries for Atlantic Swordfish, Atlantic Bigeye Tuna, and Atlantic Albacore

Additional information about the operation of U.S. HMS fisheries can be found in the 2001 SAFE Report (NMFS, 2001a).

3.3.1 International HMS Fisheries

Swordfish are harvested throughout the Atlantic in tuna and swordfish longline fisheries. Within the North Atlantic, major harvesting nations include Japan, Spain, the United States, Canada, and Portugal; the U.S. quota is 29% of the total North Atlantic quota. Numerous other countries, both members and non-members of ICCAT, harvest lesser amounts of swordfish. In the south Atlantic, vessels fishing for swordfish are primarily from Brazil, Spain, Japan and Uruguay; U.S. vessels landed less than 2% of total south Atlantic landings in 1999. Japanese vessels catch swordfish incidental to tuna longline operations throughout the Atlantic Ocean. In November 1999, ICCAT adopted a rebuilding program that accounts for dead discards as a source of mortality and reduces the total allowable catch to a level that has a 50 percent probability of rebuilding the stock within 10 years. The rebuilding trajectory assumes that all ICCAT nations maintain their landings at or below quotas, and that those countries which do not have a specific quota do not exceed the quota set aside for "others" on a collective basis. In the past, reported swordfish landings have exceeded the total allowable catch by about 10 percent per year. In addition, there are countries and vessels that are fishing illegally, are unregulated and are not reporting their harvests to ICCAT.

At the 1997 ICCAT meeting, the total allowable catch of South Atlantic swordfish was established at 14,620 mt whole weight (ww; the total weight of the fish before processing) per year, for 1998, 1999 and 2000. This recommendation included the United States as a minor harvesting nation that shares in 5.5 percent of the total South Atlantic quota. The United States received 384 mt ww (289 mt dw) of the annual allocation for the three years covered by the ICCAT recommendation, based on "recent levels." The U.S. swordfish quotas are applied to a fishing year, beginning June 1 and ending May 31 of each calendar year.

Bigeye tuna are fished in the Atlantic Ocean and by several nations; using three major gears to harvest this Atlantic-wide stock (longline, baitboat, and purse seine). Baitboat fisheries operate predominantly in the eastern Atlantic; purse seiners operate in the tropical Atlantic, and longline vessels operate throughout by many countries, including the United States. The two major longline fisheries targeting bigeye tuna are operated by Japan and Taiwan. Japanese import statistics indicate that IUU catches of bigeye tuna have been increasing and were at about 25,000 MT in 1999 (SCRS, 2000).

The primary nations targeting albacore tuna in the North Atlantic include Spain, France, and Taiwan. The U.S. share of North Atlantic albacore landings is typically 2-3%. The historical

surface fisheries for N. Atlantic albacore tuna include Spanish trolling in the Bay of Biscay as well as baitboats in the Bay of Biscay and near the Azores. Vessels from Taiwan target large albacore tuna with longline vessels in deeper waters of the central and western North Atlantic. Smaller albacore tuna are caught primarily by surface fishing gears such as driftnets and pelagic pair trawls. Major harvesters of south Atlantic albacore include Brazil, Taiwan, Spain, Japan, Namibia and South Africa; U.S. vessels landed less than 1% of total south Atlantic landings. For additional information on this topic, see the 2001 SAFE Report (NMFS, 2001a).

3.3.2 U.S. Pelagic Longline Fishery

Pelagic longline vessels account for almost all U.S. commercial swordfish landings and almost three-quarters of U.S. bigeye tuna landings in 1999 (NMFS, 2000b). The U.S. longline fishery is a multi-species fishery that depends on harvesting several primary marketable target species including a variety of tunas and sharks, in addition to swordfish. On average, over the past five years, pelagic longline vessels have accounted for approximately half of North Atlantic albacore landings. The longline fishery is responsible for all U.S. landings of swordfish and albacore in the south Atlantic. U.S. pelagic longline fishermen are subject to quotas. time/area closures, and target catch requirements. Bycatch in the Atlantic pelagic longline fisheries is commonly managed through the use of gear modifications, target catch requirements, and closed areas. Bycatch is particularly high in the U.S. Atlantic longline fishery due to regulatory discards; U.S. fishermen are required to throw back (alive or dead) undersized swordfish and tunas, bluefin tuna (if they don't meet target catch requirements), billfish, and sharks (if they are out of season). Additional information on management of U.S. HMS fisheries can be found in the HMS FMP (NMFS, 1999).

3.3.3 Other U.S. Fisheries for Atlantic Swordfish, Bigeye Tuna, and Albacore

Minor U.S. commercial swordfish landings are made by otter trawl vessels fishing for squid, mackerel and butterfish (primary prey species sought by swordfish) and harpoon, rod and reel, and handline (hand gear). Minor commercial landings of BET and albacore are made by rod and reel and handline. Albacore are also caught in coastal gillnet fisheries.

Recreational fishermen pursue each of these species, predominantly using rod and reel. Their landings are estimated using various dockside and phone surveys. For additional information regarding these fisheries or the monitoring scheme, refer to the 2001 SAFE Report (NMFS, 2001a.)

4.0. ALTERNATIVES INCLUDING THE PROPOSED ACTIONS

4.1 Alternatives for North Atlantic Swordfish Management

4.1.1 Establish a 400 mt ww (301 mt dw) Conservation Reserve Quota for North Atlantic Swordfish (PREFERRED ALTERNATIVE)

NMFS would use 400 mt ww (301 mt dw) of unused 1999 and 2000 North Atlantic swordfish quota to establish a conservation reserve. At this time, the reserve would be available only to Japan. The reserve quota would be establish by final rule; the allocation would occur through publication of an in-season notice.

4.1.2 No Action (Not Preferred)

There is not currently any reserve category for quota. The North Atlantic swordfish stock is being managed under an international rebuilding program and incidental catch of swordfish in the Japanese tuna fishery has resulted in an overage of Japanese quota.

4.2. Alternatives for South Atlantic Swordfish Catch Limits

4.2.1 No Action (PREFERRED ALTERNATIVE)

Currently, U.S. regulations specify that the annual landings quota for the south Atlantic swordfish fishery is 289 mt dw (384 mt ww). Following the November 2000 ICCAT meeting, the United States sent a letter to ICCAT describing our intent to maintain the U.S. quota at this level for the year 2001. No action by NMFS is required at this time, since regulations consistent with this international agreement are already in place.

4.2.2 Apply Unused South Atlantic Swordfish Quota from 2000 to the 2001 fishing year (Not Preferred)

Under this alternative, unused south Atlantic landings quota from the 2000 fishing year would be added to the U.S. landings quota for 2001. This alternative is not preferred. The applicable ICCAT recommendations do not specifically authorize a carryover of any underharvest of the U.S. south Atlantic swordfish quota. The United States has taken the position that it would not be appropriate for any countries in the "others" category to roll over unused catch in this fishery. The ICCAT recommendation adopted in 2000 calls for countries to hold catches of south Atlantic swordfish to "recent levels" and does not specify country-specific quotas. Adopting regulations to apply underage rules in this case would not be consistent with the U.S. position relative to compliance.

4.3 Alternatives for Reinstating Prohibition Regarding Possession of Fish in Violation of International Regulations/Recommendations

4.3.1 Reinstating Previously Published Regulations (PREFERRED ALTERNATIVE)

NMFS would prohibited persons and vessels subject to the jurisdiction of the United States from possessing fish taken in violation of ICCAT recommendations or from violating another country's fisheries regulations pertaining to species managed by ICCAT.

4.3.2 No Action (not preferred)

These regulations were inadvertently left out of the consolidated regulations when the final HMS FMP was published in 1999. No action would prevent the prosecution of vessels that are currently fishing inconsistent with the fishery conservation and management regulations of other countries.

4.4 Alternatives for Authorized Fishing Areas

4.4.1 Clarify Authorized Fishing Areas for Atlantic HMS (PREFERRED ALTERNATIVE)

ICCAT currently manages bluefin based on a two-stock hypothesis, with the two management units separated at 45° W above 10° N and at 25° W below the equator, with an eastward shift in the boundary between those parallels. The 20-year rebuilding program for west Atlantic bluefin tuna, which was adopted by ICCAT in November 1998, specifies that there shall be no transfer of fishing effort from the west Atlantic to the East Atlantic or vice versa. Under this alternative, NMFS would clarify U.S. regulations to ensure that U.S. vessels comply with this prohibition on the transfer of fishing effort.

4.4.2 No Action (Not Preferred)

Without regulations that clarify allowable fishing areas for U.S. fishermen targeting HMS, there is a risk that U.S. vessels may transfer fishing effort to the east Atlantic. The No Action alternative would not be consistent with the intentions that have been expressed by the United States in response to concerns voiced by other members of ICCAT.

4.5 Alternatives for North Atlantic Albacore Catch Limits

4.5.1 No Action (PREFERRED ALTERNATIVE)

There is not currently a quota for U.S. fishermen landing North Atlantic albacore. The United States does not catch albacore at levels approaching the quota. Our participation in this fishery is minimal.

4.5.2 Establish a Quota with In-Season Monitoring for North Atlantic Albacore (Not preferred)

Under this alternative, NMFS would implement the one-time quota of 607 mt through regulations that provide for real-time monitoring of the North Atlantic albacore fishery and provide for the

fisheries to be closed in the event that the quota was reached. This option would involve significant administrative burden, since this fishery has never been managed based on a quota in the past. Given the relatively minor level of U.S. landings and the administrative burden that would be involved in managing the fishery on a real-time basis, this alternative is not preferred at this time.

4.6 Alternatives for South Atlantic Albacore Catch Limits

4.6.1 No Action (PREFERRED ALTERNATIVE)

There is currently no U.S. quota for South Atlantic albacore. The U.S. fishery operates at a minimal level with respect to this species. If landings were to increase, there is no mechanism to limit landings during the fishing year.

4.6.2 Establish a Quota with In-Season Monitoring for South Atlantic Albacore (not preferred)

Under this alternative, NMFS would amend the regulations to establish a 100 mt landings quota for south Atlantic albacore. The alternative is not preferred because it seems unnecessary given the recent level of south Atlantic albacore landings in the U.S. fishery.

4.7 Alternatives for Restricting and Monitoring Trade of Atlantic Bigeye Tuna

4.7.1 Implement trade restrictions (PREFERRED ALTERNATIVE)

This alternative would ban the imports of bigeye tuna from the following countries: Belize, Panama, Honduras, Cambodia, Equatorial Guinea, and St. Vincent and the Grenadines.
The 2000 ICCAT recommendation indicates that an import prohibition against Honduras should take effect on Jan. 1, 2002, unless ICCAT decides at its 2001 meeting that this measure would be unnecessary based on documentary evidence. NMFS will include this prohibition in this proposed rulemaking but if finalized, NMFS would reserve the section for a delayed effective date, if ICCAT determines it is necessary. This measure would also implement regulations including a rebuttable presumption that any imported bigeye tuna was harvested by a vessel of the exporting nation. In this instance, the exporter, if exporting bigeye tuna from a country listed above, would need to prove to U.S. Customs that the fish was harvested by a vessel flying the flag of another nation.

4.7.2 Implement a Certificate of Eligibility to Monitor Trade Restrictions (Not preferred at this time)

This alternative would require all bigeye tuna imports to be accompanied by a Certificate of Eligibility that indicates the flag of harvesting vessel, ocean of origin, and certification that the fish was not caught by a vessel included in the trade restrictions above. Importers would be responsible for mailing these COE forms to NMFS on a bi-weekly basis. Data would be cross-

checked with Customs data that NMFS currently receives on a monthly basis. Shipments of Atlantic bigeye tuna from these countries would not be approved for entry by U.S. Customs. This alternative is not preferred because NMFS is working internationally through ICCAT to develop a much more comprehensive monitoring scheme, consistent with a 2000 ICCAT recommendation. The statistical documentation scheme would be in place by January 2002. Therefore, beginning a new Certificate of Eligibility program would be redundant and confusing to importers of bigeye tuna. Therefore, NMFS proposes to monitor trade of bigeye tuna through a rebuttable presumption that any bigeye that enters this country is assumed to be harvested by the exporting country, unless proven otherwise. NMFS will use data submitted on a monthly basis by the U.S. Customs Service to check the origins of imports of bigeye tuna.

4.7.3 No Action (not preferred)

It would not be possible for the United States to comply with the ICCAT recommendation under this alternative. We do not currently collect information to indicate the flag of the harvesting vessel is for imported bigeye tuna. Further, we would not be able to prohibit imports of bigeye tuna under this alternative.

4.8 Summary of Alternatives Considered

NMFS is required to implement ICCAT recommendations under the Atlantic Tunas Convention Act (ATCA), if the United States accepts those recommendations. The preferred alternatives discussed above would satisfy the United States' obligation to implement the binding conservation and management measures that have been adopted by ICCAT. The preferred alternatives are also consistent with the goals of the HMS FMP, specifically, to prevent overfishing and rebuild overfished fisheries. The environmental and economic consequences of these preferred alternatives are described below in Sections 5.0 and 6.0, but in general, these impacts are likely to support environmental and economic management objectives of the agency. Alternatives that would not be consistent with U.S. obligations to ICCAT and the goals of the HMS FMP are not preferred at this time.

5.0. ENVIRONMENTAL CONSEQUENCES OF ALTERNATIVES

5.1 Ecological Effects

The proposed changes are not expected to change fishing effort, catch, bycatch, or fishing behavior and patterns. Fishing is expected to continue year-round subject to time/area closures and quotas. There is expected to be a significant benefit of the Swordfish conservation reserve.

5.1.1 Impacts on Target Species

The conservation benefits of the **400 mt reserve quota** transfer action are considerable. This proposed action would help to ensure that Japanese bycatch of swordfish does not jeopardize the 10-year rebuilding program. It will enable all countries fishing in the North Atlantic to remain within the total allowable catch that was established based on the best available scientific information. In theory, fishermen may see increased landings revenues in the future if the North Atlantic swordfish stock continues to rebuild. The SCRS has warned that the rebuilding projections are sensitive to any level of overharvest. The proposed regulations are designed to implement an international agreement that will keep the rebuilding program on track, with a Total Allowable Catch that incorporates discard mortality. There are no expected impacts on other species. There are differences between Japanese longline sets and American. To the extent that Japanese have a higher or lower bycatch, the effect of transferring U.S. quota to Japanese could have impacts on both target-and non-target species. NMFS has not completed an evaluation of reported catch by Japanese vessels in a recent fishing year and therefore cannot estimate those impacts at this time.

The **prohibition on possession** of fish taken in violation to an ICCAT recommendation or an international regulation would have ecological benefits to species if it results in more fishermen being prosecuted if they are operating illegally and contrary to conservation measures.

The provision to **clarify fishing areas** has positive environmental impacts for the west Atlantic tuna stock, upon which U.S. fishermen are dependent, because it also prohibits the transfer of any fishing effort from the east Atlantic to the west Atlantic. Vessel monitoring systems (VMS), if required in the pelagic longline fishery in the future, would provide NMFS with information regarding which vessels are fishing in the Eastern Atlantic Ocean. They cannot enforce the prohibition on landing bluefin tuna from these areas because they only provide position reports, however.

The United States expressed some concern with the international agreement on **South Atlantic swordfish quotas**, since the lack of country-specific allocations could allow for overfishing to occur. However, the stock is not currently considered overfished. In addition, this problem could not be avoided by a unilateral reduction in U.S. landings, given that the United States is responsible for only a small share of the mortality on this stock. The environmental impacts resulting from the status quo for the south Atlantic swordfish fishery during 2001 are not expected to be significant. The alternative to roll-over unused South Atlantic swordfish quota from 2000 into 2001 would have a negative environmental impact, since it would authorize an

increase in U.S. landings even though the U.S. has already expressed concern that overfishing may occur in this fishery. The United States remains concerned that without a well-defined allocation for each country, overfishing may cause the target TAC to be exceeded.

No environmental impacts are expected from maintaining the **North Atlantic albacore fishery** at the status quo level, since any overharvests on the part of the U.S. fishery will be addressed in the following year.

No environmental impacts are expected from maintaining the **South Atlantic albacore fishery** at the status quo level, given the minimal level of U.S. involvement in this fishery. After the 2000 stock assessment, the SCRS concluded that the recent level of south Atlantic albacore landings can probably be maintained into the near future without causing a substantial decline in spawning stock biomass. The management recommendation adopted by ICCAT in November 2000 established a TAC of 29,200 mt, which is considered replacement yield for the fishery. Furthermore, the recommendation specifies that parties not fishing actively for south Atlantic albacore (i.e., having caught on average less than 100 mt per year during the years 1992-96) be subject to an annual catch limit of 100 mt. This provision applies to the United States, based on U.S. catch history. However, since less than 2 mt of south Atlantic albacore were landed by U.S. vessels during 1999, NMFS is not proposing to amend the regulation to establish a quota of 100 mt.

Implementing **trade restrictions on Atlantic bigeye tuna** would likely benefit the stock as it would discourage IUU fishing and aid SCRS in evaluating management measures in light of the need for rebuilding this stock. Not implementing such trade restrictions would likely have negative impacts on Atlantic bigeye tuna because large-scale tuna fishing could continue to occur unregulated and without reporting their catch. It is necessary to control these IUU vessels in order to support rebuilding of this overfished stock. Without specific monitoring of trade by the United States (flag of harvesting vessel and ocean of origin data), it would be difficult for ICCAT to undertake a comprehensive analysis of the tuna they consume. Therefore, NMFS will establish in the future a comprehensive trade monitoring program consistent with ICCAT recommendations regarding statistical documentation schemes. The preferred alternative could also have positive impacts on other HMS and protected species if it reduces the level of IUU fishing. Longline vessels frequently catch other species; turtles, sea birds, and marine mammals, as well as billfish, bluefin tuna, and sharks. Large-scale illegal fishing is likely to have a negative impact on many species; this impact, however, is not quantifiable at this time. ICCAT has received correspondence from St. Vincent indicating a willingness to get involved in ICCAT and comply with ICCAT measures, which would have a positive impact on target and non-target species.

5.1.2 Impacts on Non-Target Finfish

The alternatives proposed in this rulemaking are not expected to change significantly the impact of the fishery on non-target finfish. Pelagic longline effort is not expected to increase under any of these options, nor is it expected to decrease. If trade restrictions effectively limit IUU longline fishing for bigeye tuna, non-target species may be positively affected, as mentioned above.

Although Japanese fishermen catch and retain billfish, U.S. fishermen also catch billfish, but discard them, dead and alive. In 2000, ICCAT recommended that countries release live blue and white marlin, to support rebuilding of these species, thereby "equalizing" the mortality on billfish by all fleets (i.e., all dead billfish would be "killed", but all live billfish would be released by all. It is therefore expected that transferring U.S. quota to the Japanese would not have a detrimental effect on billfish populations.

Given the minor share of U.S. mortality in the North Atlantic albacore fishery (< 2%; it is primarily incidental catch), and given that the ICCAT recommendation provides for the adjustment of next year's catch level in the case of overharvest or underharvest, NMFS is not proposing any new regulations for this fishery. Since 1996, U.S. landings of North Atlantic albacore have been less than 607 mt, on average (See Table 5.1). While the commercial landings are fairly consistent from year to year, the level of recreational landings is more variable. Albacore is usually encountered incidentally in the U.S. longline and rod and reel fisheries; it is not often the primary target species. Implementing this one-year quota through new regulations and in-season monitoring would be an expensive endeavor. For these reasons, the no action alternative is preferred at this time. There are not expected to be any environmental impacts from the No Action alternative.

Table 5.1 Recent Historical Landings of North Atlantic Albacore by U.S. Vessels

Year	Commercial Landings	Recreational Landings	U.S. Total Landings
1996	173 mt	339 mt	512 mt
1997	246 mt	269 mt	515 mt
1998	229 mt	601 mt	830 mt
1999	227 mt	90 mt	317 mt
Average	219 mt	325 mt	544 mt

5.1.3 Impacts on Protected Species

Marine Mammals

These species are sometimes hooked on pelagic longline gear and fishermen report takes of mammals to NMFS in a marine mammal logbook. The Atlantic pelagic longline fishery is considered a Category I fishery under the Marine Mammal Protection Act (MMPA). In 1999 there were six observed takes of marine mammals by pelagic longlines. This number has been extrapolated out to an estimated 205 mammals fleet-wide. In addition to mammals released *dead* from fishing gear, which is uncommon in the pelagic longline fishery, NMFS must consider post-release mortality of mammals released *alive*. Assuming interaction levels remain fairly constant under these proposed alternatives, marine mammals are protected by take reduction measures implemented for the longline fishery.

The Atlantic Stock Recovery Group (SRG) recognized the need to immediately apply serious

injury "guidelines" to the Atlantic pelagic longline fishery. At the April 1999 meeting, NMFS presented a preliminary analysis of the serious injuries in this fishery and gave a rough estimate of the number of injuries. Based on these levels of takes, the SRG recommended maintaining the Category I listing for the Atlantic pelagic longline fishery in the proposed List of Fisheries for 2001. Further measures to protect these species have not been proposed at this time.

Sea Turtles
Transferring swordfish quota to Japanese vessels could result in increased sea turtle takes if Japanese vessels have a higher take rate than U.S. vessels, however, it is not likely that Japanese vessels would stop longlining if we didn't transfer the quota. As a result, this action is not likely to have any impact on sea turtles. If U.S. fishing effort would increase in response to this rolling-over of 1999 and 2000 unused quota, then the proposed action might have the effect of reducing turtle takes overall by reducing the number of sets made by U.S. fishermen. However, it is not likely that U.S. fishermen would use all of this rolled-over quota due to low fishing effort, in which case the alternative would not affect sea turtle takes.

The prohibition on possession of fish taken contrary to international regulations is not likely to have any impact on sea turtles.

Continuation of the U.S. South Atlantic swordfish fishery is not likely to have adverse effects on sea turtles, because the quota is to remain the same. In 2000, U.S. vessels fishing for swordfish south of 5 degrees N. latitude likely interacted with sea turtles but an estimate is not available at this time. Uruguayan longliners targeting tuna and swordfish in the southwest Atlantic reported loggerhead and leatherback sea turtle interactions (Achaval et al., 2000). The HMS BO issued in June 2001 (NMFS, 2001b) describes the expected impacts of the existing U.S. longline fishery for swordfish and tunas.

Trade restrictions on IUU vessels may have a positive impact on sea turtles if these actions ultimately result in the increased accountability of those vessels and causes those vessels to cease fishing.

Other alternatives are not likely to have an effect on sea turtles.

5.1.5 Sea Birds

Takes of sea birds have been minimal in this fishery, most likely due to the setting of longlines at night and/or fishing in areas where birds are largely absent. Transferring swordfish quota to Japanese vessels could result in increased sea bird takes if Japanese vessel have a higher take rate than U.S. vessels, however, it is not likely that Japanese vessels would stop longlining if we didn't transfer the quota. As a result, this action is not likely to have any impact on sea birds.

5.1.6 Impacts on Essential Fish Habitat (EFH)

The HMS FMP and Amendment One to the Atlantic Billfish FMP state that Atlantic highly migratory species occupy pelagic oceanic environments. However, some juvenile and sub-adult

sharks occupy coastal and near-shore environments. The HMS FMP describes habitat damage by pelagic longlines as negligible to the pelagic environment. The alternatives discussed in this document are anticipated to have no negative impact on the physical environment or essential fish habitat**.** Under the status quo alternative, there would not likely be any significant impacts on EFH, since a change in fishing activity would not be expected.

5.2 Economic Effects of the Proposed Regulations

Nationwide, swordfish prices have decreased over the past eight years, which indicates that total gross revenues for the fleet as a whole have probably declined as well. Declining prices for swordfish despite decreasing U.S. supply may stem from substitution with imports and tuna. U.S. industry constituents maintain that competition from imports occurs during critical months of the year, driving down prices received by U.S. fishermen. Data from U.S. Customs have indicated a sharp rise in swordfish imports, beginning in 1997. Swordfish prices vary by size and quality, with prices first increasing with size, up to about 275 lb, then decreasing due to higher handling costs for larger fish. Swordfish are landed by two classes of vessel operations: distant-water and inshore vessels. Because of the considerable difference in trip length, the quality of the fish landed varies between the two vessel types. Swordfish prices also vary during the month, due to the heavier fishing effort around the period of the full moon. In addition, prices for swordfish decrease with an increase in imports and as a result of seasonal closure and market gluts.

Establish 400 mt Reserve quota. The proposal to establish a 400 mt ww (301 mt dw) reserve quota for North Atlantic swordfish would reduce the landings available to U.S. fishermen during the 2001 fishing year. However, it is unlikely the U.S. fishermen would be able to catch an additional 301 mt dw of swordfish , in addition to the unused 1999 quota (540.8 mt dw). This underharvest was addressed in an in-season action recently (66 FR 46401, September 5, 2001) and the quota has been made available to the directed fishery for the 2001 fishing year. The annual landings quota has not been reached by U.S. fishermen for the past several years and was not reached in fishing year 2000 (based on preliminary landings data). Given the considerable increase in available landings resulting from a rollover of unused quota, it is likely that the rolled over quota proposed to be used for the reserve quota would not be harvested by the U.S. fishery. Using U.S. quota to support conservation efforts could result in a large long-term economic gain, albeit one that is unquantifiable.

It is anticipated that the U.S. fishery will have sufficient quota available to support the current level of effort. In fact, effort may decline during the 2001 fishing year, given that several time/area closures have recently been implemented for the U.S. pelagic longline fleet. Therefore, the set-aside of 400 mt ww (301 mt dw) from the U.S. landings quota for 2001 is not expected to have significant economic impacts on U.S. fishermen. Because impacts are always unknown due to changing fishing patterns, entry of inactive vessels into the fishery, etc, and there in fact could be a negative impact of this action on the U.S. fishery in the next two years.

For example, during the 1999 fishing year, the United States reported an underharvest of 549.8 mt dw, all of which was added to the 2001 landings quota. The gross ex-vessel revenue from 301 mt dw would be $2.1 million ($3.18 per pound for 661,410 lbs [301 mt dw * 2204.6 lbs/mt dw]).

However, NMFS and the pelagic longline industry representatives agree that the current U.S. pelagic longline fleet operating in the Atlantic is not likely to be able to harvest the 301 mt dw that would be allocated to the Reserve quota in addition to the 1999 and potential 2000 unused quota.

There are, however, large longline vessels that hold permits in the Atlantic fishery but are currently fishing in the Pacific. If these vessels move back to the Atlantic to fish for swordfish, impacts could be substantial as these vessels have the capability of harvesting the quota very quickly. Their activities in the Atlantic may preclude other vessels from fishing in their current capacity (year-round or as they wish), as there may be a seasonal closure if the quota is reached. If these vessels move into the Atlantic Ocean during fishing year 2000 or 2001 (begins June 1, 2001), impacts of the 400 mt ww (301 mt dw) reserve could be significant. However, this action by the Pacific fleet vessels that hold Atlantic permits is not anticipated.

The economic impacts in the long-term of the quota transfer would not be significant, since future U.S. quota would not be affected. The impacts of an overage of the dead discard allowance have been evaluated in NMFS, 2000. These impacts, which might have been buffered by rolled over unused quota from previous years, could be significant. Even with the 400 mt ww (301 mt dw) quota set aside, there is likely to be additional unused quota to roll over which would serve as a buffer for any dead discard allowance overage. Therefore, U.S. fishermen might prefer that NMFS continually carry over unused quota in the short-term in order to address discard concerns (consistent with ICCAT recommendations).

No Action. The economic impacts in the short term would probably not be significant, since U.S. vessels have not harvested the full amount of landings quota for the past several years. In the medium-term or long-term, the No Action alternative would have negative economic impacts, because the North Atlantic swordfish population would not likely continue its recovery, and the fishery would not attain the maximum sustainable yield.

Re-Establishment of Prohibitions

In the case of the re-establishment of the prohibition on possession of fish taken in violation of ICCAT recommendations, if fishermen aren't made aware of or don't understand ICCAT recommendations, they may inadvertently violate such recommendations. ICCAT recommendations are available on the ICCAT website and NMFS will try to clarify those recommendations that may be confusing.

Clarify Fishing Areas

The proposed regulations to clarify authorized fishing areas for U.S. vessels targeting HMS are not expected to have significant economic effects. Since the United States has not been allocated a share of east Atlantic bluefin tuna quota, prohibiting landings in the east Atlantic should not have an economic impact on U.S. fishermen. Only one vessel had been documented in 1999 fishing in the Eastern Atlantic for bluefin tuna and the value of that vessel's catch cannot be disclosed for confidentiality reasons. The vessel has returned to the United States, therefore there are not expected to be any short-term impacts. However, in the last decade, several vessels have reported fishing and landing or discarding bluefin tuna in the Eastern Atlantic Ocean (111 bluefin tuna reported in logbooks as landed in 1989-99).

South Atlantic Swordfish Quotas
No adverse economic impacts are expected from establishing the status quo South Atlantic swordfish quota, as U.S. fishermen landed only 51 mt ww of South Atlantic swordfish during the 1999 fishing year. While landings may be somewhat higher in 2001, due to displacement of effort resulting from time/area closures for longline vessels in the North Atlantic, only a limited number of vessels are expected to shift their effort toward the south Atlantic. The 384 mt ww quota is not unduly restrictive for the U.S. fishery at this time. Establishing a higher quota, however, may have long-term economic impacts if the total allowable catch from the stock is not sustainable.

While there would be no negative economic impacts to the fleet in the short run of rolling-over unused South Atlantic quota from 2000 to 2001 (alternative that is not preferred at this time), this action could shape the nature of the fishery by encouraging a future shift in effort from the North Atlantic to the south Atlantic, and promoting overfishing of the stock, contrary to the goals of the Magnuson-Steven Act.

Albacore
No new regulations are proposed to implement recommendations from ICCAT concerning North Atlantic albacore, south Atlantic albacore, or south Atlantic swordfish. The No Action alternative which is preferred in each of these cases is not expected to have any economic effects. For a more detailed discussion of the economic effects of each alternative considered, refer to Chapter 4. Establishing a quota with in-season monitoring for South Atlantic albacore would not be expected to provide any economic benefits. This alternative would not be expected to have any negative economic impacts, given the minimal level of U.S. involvement in this fishery.

Trade Restrictions
If the United States does not implement trade restrictions, there could be an economic impact on U.S. fishermen in the long term if bigeye tuna continue to be overfished. Stock size could reach dangerously low levels which may cause ICCAT to recommend highly restrictive measures with significant impacts on U.S. fishermen. In the short-term, there is not likely to be any economic impact. Implementing trade restrictions is not likely to have any impact on importers at this time. No bigeye tuna is currently imported into the United States from the identified countries so no direct impact form the trade restrictions is anticipated.

Other Amendments to Existing Regulations

Correcting the date that applies to the swordfish dead discard allowance clarifies and reflects the intent of the relevant ICCAT recommendation. NMFS also inadvertently applied an incorrect date to the dead discard allowance for 2002. The fishing year begins June 1, 2002. The regulations erroneously state that the North Atlantic swordfish dead discard allowance of 160 mt ww should apply to the fishing year beginning May 1, 2001. This change would not have an economic impact since it neither changes the fishing year nor the intent of the dead discard allowance that ICCAT recommended.

The amendment which relates to the scope of swordfish import restrictions lessens the impact on affected importers since this revision would reduce the scope of the restrictions to include only

Atlantic swordfish, instead of applying to swordfish from all ocean areas. This amendment would also reflect the intent of the ICCAT recommendation and would correct existing regulatory language that inadvertently omits the word "Atlantic". NMFS published a final rule in December 12, 2000 (65 FR 77527) to implement trade restrictions for Atlantic swordfish that were recommended by ICCAT in 1999. NMFS inadvertently omitted the word "Atlantic" in the regulatory text which results in an interpretation of the regulations that is inconsistent with both the preamble to the final rule and the ICCAT recommendation. ICCAT intended that imports of only Atlantic swordfish (not Pacific or Indian) should be prohibited from Belize and Honduras.

In addition, NMFS inadvertently omitted a prohibition on swordfish imports. Prohibitions are a portion of Federal regulations that succinctly summarize the regulations and are utilized often by enforcement personnel. Including a prohibition does not change the nature of the regulatory requirements but adds support to prosecution of cases related to such regulatory measures. Therefore, this amendment would not have any economic impact on small entities.

5.3 Safety Issues

Like all offshore fisheries, pelagic longlining can be dangerous. Trips can be of long duration with exposure to unpredictable weather, the work can be arduous, and the nature of setting and hauling the line may cause injuries due to hooking. NMFS seeks comments from fishermen on any safety concerns they may have. Fishermen have pointed out that due to decreasing profit margins, they may fish with less crew or less experienced crew or may not have the time or money to complete necessary maintenance tasks. NMFS cannot influence the market to improve profits to fishermen, but rather encourages fishermen to be responsible in fishing and maintenance activities. Safety factors were considered in selecting the preferred alternatives, and NMFS has concluded that the proposed regulations are not likely to affect safety at sea.

5.4 Social Impacts

Social impacts are defined as the consequences to human populations that follow from some type of public or private action. These consequences may include changes in "the ways in which people live, work or play, relate to one another, organize to meet their needs and generally cope as members of a society ... " (NMFS, 1994). In addition, cultural impacts may involve changes in the values and beliefs that affect the way people identify themselves within their occupation, their communities, and society in general. Public hearings, scoping meetings, and Advisory Panel meetings provide input from those concerned with the impacts of a proposed management action.

While geographic location is an important component of a fishing community, management measures often have the most identifiable impacts on fishing fleets that use specific gear types. In addition, since the species managed by the HMS FMP are by definition highly migratory, fishermen tend to shift locations in an attempt to follow the fish. The geographic concentrations of HMS fisheries may also vary from year to year as the behavior of these migratory fish is somewhat unpredictable. The relationship between these fleets and geographic fishing communities is not always a direct one. As a result, the inclusion of typical community profiles in

HMS management decisions is difficult (see NMFS, 1999). For a description of possible social impacts associated with recent regulations, see the HMS SAFE Report 2001, Chapter 6 (NMFS, 2001a).

None of the alternatives considered for this rulemaking are likely to have significant social impacts on U.S. fishermen, dealers, importers, or related industrial workers in the long-term. Short term decreases in gross revenues that result from the establishment of a reserve quota for North Atlantic swordfish may result in long-term increases in social benefits as the stock rebuilds over the next decade. Further, trade restrictions may increase the future availability of Atlantic bigeye tuna because they support rebuilding of this stock.

In the case of the re-establishment of the prohibition on possession of fish taken in violation of ICCAT recommendations, if fishermen aren't made aware of or don't understand ICCAT recommendations, they may inadvertently violate such recommendations. ICCAT recommendations are available on the ICCAT website and NMFS will try to clarify those recommendations that may be confusing. However, for example, when a U.S. longline vessel was reportedly fishing in the Mediterranean Sea for bluefin tuna in 2000, the vessel owner was violating an ICCAT recommendation but not a U.S. regulation. That is, the United States has not been allocated East Atlantic bluefin tuna and is therefore prohibited from fishing on that stock. Authorized fishing areas are not included in the existing U.S. regulations, although they exist implicitly in ICCAT recommendations. NMFS has remedied this particular situation (regarding authorized fishing areas) by proposing to include these areas in the U.S. regulations in this proposed rule. Under the alternative to prohibit possession of a fish taken in violation of an ICCAT recommendation, the U.S. vessel mentioned above would have been investigated for a violation. This may have social and possibly, economic impacts, if fishermen may be violating international recommendations that they are not familiar with.

5.5 Mitigating Measures

No significant negative environmental impacts are expected to result from the proposed actions; therefore, NMFS does not anticipate the need for mitigating measures. Economic effects for some vessels could be significant, although this is not likely. However, some degree of economic impact is unavoidable since U.S. law (ATCA) requires that ICCAT recommendations be implemented.

5.6 Unavoidable Adverse Impacts

Any short-term adverse impact imposed by these regulations is essential to reduce fishing mortality and slow or reverse the decline of the stock as a first step toward rebuilding it to levels that will support higher and sustainable levels of harvest in the future. Trade restrictions are not likely to have any significant effect on U.S. businesses because NMFS does not have data that

indicate that, in 2000, no bigeye tuna were imported from any of the identified countries. As no regulations are being proposed at this time regarding North Atlantic or South Atlantic albacore rebuilding, there would be no unavoidable adverse impacts from this action. Given expected longline fishing patterns into the near future, NMFS does not expect any adverse impacts from the establishment of the Japanese reserve quota.

5.7 Irreversible and Irretrievable Commitment of Resources

No irreversible or irretrievable commitments of resources are expected if the preferred alternatives are implemented.

5.8 Environmental Justice Considerations

Executive Order 12898 requires that federal actions address environmental justice in the decision-making process. In particular, the environmental effects of the proposed actions should not have a disproportionate effect on minority and low-income communities. The preferred alternative would not have any significant effects on human health. The economic and social effects will be most significant in communities in coastal areas adjacent to the closures, or in the case of trade regulations, in large urban centers where imports land by aircraft at major airports. While some vessel operators and fish dealers may face reductions in revenues, the economic effects do not fall disproportionately on minority or low income communities. Further, such impacts are unavoidable in order to rebuild overfished fisheries, and without current action, declining catches would cause significantly worse impacts on coastal communities.

A potential environmental justice consideration would be if fishermen and employees of processors are minorities or from low-income households and a quota cut would create such an impact as to put small businesses *out of business*. NMFS does not have demographic data on individual fishermen, processors, or importers except those comments which have been submitted to NMFS concerning this subject. Comments on proposed measures to reduce bycatch in the Atlantic pelagic longline fishery indicated that restrictive swordfish measures may affect African-Americans in South Carolina in addition to the Vietnamese-American community in the Gulf states. Many crew members, in fact, could probably be classified as low income regardless of their ethnic profile. NMFS has no information at this time to conclude that there would be disproportionate effects on fishermen of differing races or income levels, as a result of this proposed rule.

6.0 DRAFT REGULATORY IMPACT REVIEW

The RIR provides analyses of the net benefits and costs of each alternative to the nation. This section assesses the impacts of the proposed actions. Certain elements required in an RIR are also required as part of an EA. Thus, this section should only be considered part of the RIR. Section 1 of this document describes the need for action and the objectives of the regulations. The alternatives considered are described in Section 4. No Initial Regulatory Flexibility Analysis is required under RFA because there is no significant impact to a substantial number of small entities.

6.1 Evaluation

This section presents a cumulative estimate of the economic impacts of the reserve quota alternative. The costs/benefits of the other alternatives cannot be quantified although they are discussed qualitatively in Table 6.2. This analysis concentrates on the commercial fishery because at this time the recreational fishery does not contribute significantly to total swordfish landings and there is not a separate recreational quota that would be reduced. The commercial fishery is composed of fishermen who hold a swordfish directed, incidental, or handgear permit and the related industries including processors, bait houses, and equipment suppliers. The estimates are only for commercial fishermen at the level of ex-vessel sales and do not include the induced or indirect effects that changes in landings would have on related industries. The estimates should be considered approximations with a considerable degree of uncertainty and are useful primarily for comparative purposes. Given opportunities for diversification, any impacts on related industries would most likely be subject to even greater uncertainty. Initially, however, related industries would most likely experience similar effects on revenues.

Under the Status quo alternative, 301 mt dw of swordfish quota would be available to swordfish fishermen in the 2001 fishing year; if the quota is not caught, it would be available in the 2002 fishing year. The 301 mt dw of quota is available from an underharvest of the 1999 and 2000 fishing years[1]. The entire underharvest from 1999 was rolled over to fishing year 2001 (540.8 mt dw). The swordfish price is assumed to be constant at $3.18 per pound dw (NMFS, 2001a). This was the average ex-vessel price reported in 1999 based on dealer weighout slips. Therefore, the 240 mt of quota already transferred from the 1999 season to the directed fishery in 2001 is worth approximately $1.7 million, if it is caught before May 31, 2002. If it is not caught, it will be carried into the 2002 fishing season and depending on ex-vessel prices, it could be worth more or less. NMFS will likely carry over several hundred tons of unused 2000 fishing year quota. Depending on its magnitude, it would benefit the fishermen as well, if caught. For reasons described earlier in this document, it is not likely that the pelagic longline fleet would be able to catch the available 2001 fishing year quota, regardless if it included the additional 301 mt dw.

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[1]Depending on how the math is completed, the 301 mt dw could be derived from unused incidental quota in 1999 or from unused incidental quota in 2000. NMFS chose to combine all unused 1999 quota and transferred it to the directed fishery (240 mt) and the incidental quota (300.8 mt)for 2001. NMFS will also carry over 2000 unused quota when final landings data are available. At the time this rule is finalized, a reserve of 301 mt dw will be established.

which has been transferred to the 2001 Incidental quota and will subsequently be transferred to the reserve quota. If the active fleet increased in size and fishing capacity, the 301 mt dw that is proposed to be used for the reserve quota would, in theory, be worth, $2.1 million

It should be stressed that quota is not worth anything to fishermen until the swordfish are landed and sold. Using quota to influence other countries (as in the case of Japan) to support conservation efforts could result in a large long-term economic gain to U.S. fishermen, albeit one that is unquantifiable. In theory, fishermen may see increased landings revenues in the future if the North Atlantic swordfish stock continues to rebuild.

6.2 Summary of Benefits and Costs

NMFS does not believe that the national net benefits and costs would change significantly in the long run as a result of implementation of the preferred alternatives. For the 2001 fishing year, the present value of gross and net revenues for the swordfish fishery at the ex-vessel level could be reduced, depending on the extent to which fishermen can catch the quota. In the long-term, the preferred alternatives should help rebuild the overfished stocks of swordfish by reducing dead discards of Japanese-caught swordfish and increase the benefit the nation receives from harvesting this species. Table 6.2 indicates possible changes as a result of each alternative.

Table 6.2 Summary of benefits and costs for each alternative.

Alternative	Benefits	Costs
No action on North Atlantic swordfish quotas (except rollover of unused 1999 and 2000 quota)	No change. Expected benefits of rolled over quota.	Fish stocks might decrease over time causing reduction in revenue to entire industry and fishing communities.
Implement the 400 mt ww (301 mt dw) conservation reserve for North Atlantic swordfish and transfer 200 mt dw of Incidental quota to directed fishery	*Long-term:* If reserve quota encourages Japanese fleet to conserve swordfish increase stock size, increase revenues to U.S. fishermen and related businesses in the long-term *Short term:* Incidental quota transfer reduces need for in-season premature fishery closure	*Short -term:* decrease revenues to U.S. fishermen and related businesses
Prohibit possession of fish taken in violation of ICCAT recommendations and international regulations	Long-term benefits to all ICCAT species protected by ICCAT recommendations and to other species subject to longline mortality in the EEZs of other nations.	No change except increased costs to the agency for prosecuting such cases.
Status quo quota on south Atlantic swordfish quotas	No change	No change
Add carryover to south Atlantic swordfish quota for 2001	*Short term*: Would increase the quota available to U.S. vessels for one year	*Long term:* Could encourage overfishing, by allowing carryover for parties that have not been allocated a specific quota share; Fish stocks might decrease over time causing reduction in revenue to entire industry and fishing communities.
Establish a quota for south Atlantic albacore	No change; current level of landings by U.S. vessels is well below the allowable level	Would involve administrative costs
No action for south Atlantic albacore	No change; current level of landings by U.S. vessels is well below the allowable level	No change
Establish a quota for North Atlantic albacore	Would ensure that the United States does not exceed its quota for 2001	Would involve significant administrative costs to set up a monitoring system
No action for North Atlantic albacore	No administrative costs involved	May require the United States to restrict its fishery in 2002, if landings in 2001 exceed quota
Trade restrictions for Atlantic bigeye tuna	Reduces potential for IUU fishing and supports conservation of overfished Atlantic bigeye tuna stock	Potential costs to importers who would like to develop trade relations with importers from prohibited countries. Administrative costs associated with rulemaking and enforcement
Documentation requirements for bigeye tuna	Increases enforcement of trade restrictions; allows U.S. to contribute to international database on bigeye tuna trade which may increase conservation.	Minor paperwork burden to importers. Potential costs if shipments are held back waiting for documentation. Administrative costs to NMFS and U.S. Customs
Status quo for bigeye tuna trade	Lower administrative cost for U.S. Customs and NMFS, less burden on importers/exporters of bigeye tuna	Continued IUU fishing on bigeye tuna with long-term conservation costs

In summary, the preferred alternatives may have negative economic impacts on fishing vessels, but the benefits, particularly to international management of these species are great. The objectives of the HMS FMP are consistent with ICCAT and are supported by these measures. For example, preventing or ending overfishing is particularly important for tunas, swordfish, and marlins. Establishing a reserve quota will support our efforts to avoid exceeding the total allowable catch established for North Atlantic swordfish. Likewise, trade restrictions are an important way to achieve the FMP goal of providing a framework to take necessary action under ICCAT compliance recommendations. Perhaps most importantly, implementing ICCAT recommendations supports conservation of these species throughout their range, an important objective of the Magnuson-Stevens Act which was highlighted in National Standard 3. The benefits of many of these measures are likely to be important, especially in the future, as we continue to rebuild overfished HMS species.

7.0 LIST OF AGENCIES AND PERSONS CONSULTED IN FORMULATING THE PROPOSED RULE

Discussions pertinent to formulation of the proposed action involved input from a variety of scientific and constituent interest groups including the U.S. delegation to ICCAT (included commercial and recreational fishermen, and environmental advocates), ICCAT's SCRS, ICCAT (27 member states), staff from the International Fisheries Division of NMFS.

8.0 LIST OF PREPARERS

This document was prepared by a team of individuals from the Office of Sustainable Fisheries, National Marine Fisheries Service including Jill Stevenson (St Petersburg, FL) and Rachel Husted (Silver Spring, MD).

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Appendix A. **Summary of existing trade measures related to the conservation of Atlantic highly migratory species.**

Measure	**Objective**	**Countries Affected**	**ICCAT Recommendation(s)**	**Year Implemented (Effective Date)**
Billfish Certificate of Eligibility requirement	Support enforcement of U.S. ban on commercial possession of Atlantic billfish by prohibiting the sale of Atlantic billfish in the U.S.	Affects all billfish imported or sold in the United States with the exception of Pacific coastal states	n/a	5/02/91
Bluefin Tuna (BFT) Statistical Document requirement	Track the trade of Atlantic BFT, especially catch that has not been reported to ICCAT	Affects all bluefin tuna imported, exported, or transshipped, regardless of origin	1990s	Program evolved throughout 1990s
Bluefin tuna import prohibition	Support ICCAT's general objectives	Panama, Honduras, and Belize (applicability to Panama rescinded 1/11/01) Equatorial Guinea	1997 1999	Panama: 1/01/98 Honduras & Belize: 8/20/97 1/11/01
Swordfish (SWO) Certificate of Eligibility requirement	To enforce the U.S. minimum size by banning the sale of undersized Atlantic swordfish in the U.S.	Affects all imports of swordfish into U.S., regardless of origin	1997	6/14/99
Swordfish import prohibition	Support ICCAT's general objectives	Honduras, Belize	1999	1/11/01
Bigeye (BET) tuna prohibition	Support ICCAT's general objectives	Belize, Cambodia, Equatorial Guinea, and St. Vincent and the Grenadines Honduras	2000 2000	this action; to be effective before 10/31/01 to be considered at 2001 ICCAT meeting; could go into effect by early 2002
Bigeye tuna and swordfish statistical document requirement	Track the trade of Atlantic BET and SWO, especially catch that has not been reported to ICCAT	would affect all BET and SWO imported, exported, or transshipped, regardless of origin	2000	To be discussed at 2001 ICCAT meeting; possible implementation by 6/01/02