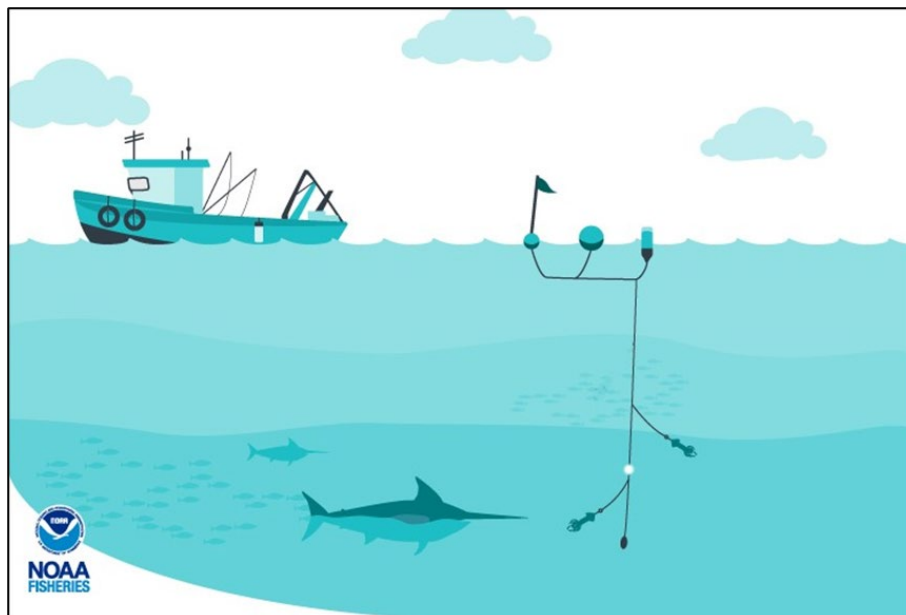


Revisions to Atlantic Highly Migratory Species Fishing Gear Regulations

Draft Environmental Assessment (ID: EAXX-006-48-1HQ-1774402440),
Regulatory Impact Review, and
Initial Regulatory Flexibility Analysis



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

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Action: Revisions to Atlantic Highly Migratory Species Fishing Gear Regulations

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Lead Agency: National Marine Fisheries Service
Office of Sustainable Fisheries

For Further Information: Atlantic Highly Migratory Species Management Division (F/SF1)
1315 East-West Highway
Silver Spring, MD 20910
Phone: 301-427-8503

Abstract: The National Marine Fisheries Service (NMFS) is proposing several changes to fishing gear regulations and requirements in fisheries targeting Atlantic highly migratory species (HMS). Over the past two decades, many fishing gear-specific management measures have been put in place to reduce bycatch, increase post-release survivability, and achieve other objectives as necessary. However, HMS fishing gear and techniques have evolved over time, and some management measures may need to be updated to better achieve fishery management goals. This action considers changes to gear regulations in HMS fisheries in order to increase flexibility and remove inefficiencies while still achieving fishery conservation and management goals. This action could affect the commercial buoy gear and speargun fisheries, which fish for bigeye, albacore, yellowfin, and skipjack (collectively known as BAYS) tunas, swordfish, and sharks throughout the entire range of the HMS fishery. This action also considers overarching changes to increase flexibility regarding how bait can be collected in all HMS fisheries. This action is being taken pursuant to the rulemaking authority under the Magnuson-Stevens Fishery Conservation and Management Act.

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1 Introduction

1.1 REGULATORY AUTHORITIES

The National Marine Fisheries Service (NMFS), on behalf of the Secretary of Commerce, is responsible for managing Atlantic highly migratory species (HMS)¹, including the federal Atlantic shark, tuna, billfish, and swordfish fisheries, pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act; 16 U.S.C. 1801 *et seq.*) and consistent with the Atlantic Tunas Convention Act (ATCA; 16 U.S.C. 971 *et seq.*). Under the Magnuson-Stevens Act, consistent with 10 National Standards, NMFS must manage fisheries to prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery. Since the early 1990s, under the authority provided in § 304(g)(1) of the Magnuson-Stevens Act, NMFS has implemented several fishery management plans (FMP), FMP amendments, and numerous regulations relating to HMS fisheries. In addition, ATCA is the implementing statute for binding recommendations of the International Commission for the Conservation of Atlantic Tunas (ICCAT). Currently, NMFS manages HMS fisheries under the 2006 Consolidated Atlantic HMS FMP (HMS FMP; 71 FR 58058, Oct. 2, 2006), its amendments, and implementing regulations at 50 CFR part 635.

In accordance with both the Magnuson-Stevens Act (see § 304(g)(1)(E) requiring NMFS to review, on a continuing basis, and revise as appropriate, the conservation and management measures for HMS) and ATCA, NMFS analyzed the potential environmental consequences, including ecological, economic, and social impacts, for the alternatives in this document and associated proposed rule. Through this action, NMFS considers potential changes to gear regulations and requirements in fisheries targeting HMS that could provide increased flexibility and still meet applicable goals. This action follows consideration of public comment received through a scoping effort (89 FR 36763, May 3, 2024) which outlined potential options.

The Magnuson-Stevens Act, among other things, requires measures necessary for the conservation and management of the fishery to be consistent with the ten National Standards set forth in § 301(a), including a requirement to use the best scientific information available as well as to consider potential impacts on residents of different States, efficiency, costs, fishing communities, bycatch, and safety at sea. While all the National Standards are relevant, specific to the objectives of this action, National Standard 1 requires that conservation and management measures prevent overfishing while supporting the achievement of optimum yield from U.S. fisheries on a continuing basis, and National Standard 5 requires that conservation and management measures consider efficiency in the utilization of fishery resources. Additionally, the Magnuson-Stevens Act requires that FMPs contain management measures which are necessary and appropriate to support, among other things, the long-term health and stability of the fishery, and the assessment and specification of the extent to which U.S. fishing vessels harvest optimum yield (§ 303(a)). Additionally, the Magnuson-Stevens Act also allows for the

¹ The Magnuson-Stevens Act, Section 3 (16 U.S.C. 1802), defines the term “highly migratory species” as tuna species, marlin (*Tetrapturus* spp. and *Makaira* spp.), oceanic sharks, sailfishes (*Istiophorus* spp.), and swordfish (*Xiphias gladius*) (§ 3(21)). Further, the Magnuson-Stevens Act, Section 3, defines the term “tunas species” as albacore tuna (*Thunnus alalunga*), bigeye tuna (*Thunnus obesus*), bluefin tuna (*Thunnus thynnus*), skipjack tuna (*Katsuwonus pelamis*), and yellowfin tuna (*Thunnus albacares*) (§ 3(44)).

requirement of permits by NMFS (§ 303(b)(1)); for implementing or modifying restrictions on gear and equipment (§ 303(b)(4)); and for NMFS to implement management measures to protect non-target species and habitat (§ 303(b)(12)). The procedures established by the HMS FMP and HMS regulations (50 CFR 635.34(b)) allow NMFS to modify gear restrictions in the HMS fishery using a framework adjustment.

In addition to the Magnuson-Stevens Act and ATCA, any management measures must also be consistent with other applicable laws including, but not limited to, the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Marine Mammal Protection Act (MMPA), and the Coastal Zone Management Act (CZMA). As described below, this document is a consolidated document that is meant to comply with all these statutes.

1.2 BRIEF MANAGEMENT HISTORY

This section provides a brief overview of HMS fishery management related to this action. More detail regarding the history of management measures related to this action is in Chapter 3.

Since the 1999 Federal FMP for Atlantic Tunas, Swordfish, and Sharks (1999 FMP) and Amendment 1 to the Atlantic Billfish FMP (64 FR 29090, May 28, 1999), NMFS has implemented a wide range of management measures specific to fishing gear in order to comply with the Magnuson-Stevens Act and ATCA. These management measures were designed to, among other things, prevent or stop overfishing and to minimize bycatch to the extent practicable. “Bycatch” in fisheries is a term that generally refers to discarded fish or interactions between fishing operations and protected species. Under the Magnuson-Stevens Act, bycatch is specifically defined as fish that are harvested in a fishery, but that are not sold or kept for personal use, and includes both economic and regulatory discards (§ 3(2)). Many of these management measures included restrictions on fishing gear to reduce impacts on bycatch species, increase post-release survivability, limit the use of some gears to reduce lost and derelict gear, and meet other objectives. While each of these fishing gear management measures helped achieve fishery conservation and management goals, over the course of 2 decades there have been many changes in species distributions, fishing gears, fishing techniques, market conditions, and fishing interests. Thus, NMFS is revisiting and proposing to update gear measures to avoid unanticipated consequences, such as unnecessarily limiting fishing opportunities, which in turn may limit the ability to achieve optimum yield in HMS fisheries. Additionally, the proposed rule may help fishermen to adjust their fishing techniques to account for a changing environment and changing species distributions and/or to modify their gear to be more efficient or less likely to catch non-target species.

Through the proposed action considered in this document and after consideration of public comment received through a scoping effort (89 FR 36763, May 3, 2024), NMFS considers potential changes to buoy gear regulations regarding gear deployment and retrieval, authorization under additional permits, and for the retention of additional species. NMFS is considering changes to speargun fishing gear regulations to authorize the commercial harvest of some tunas. We are also considering overarching changes regarding allowable gear for the collection of bait in HMS fisheries. Some commonly used bait collection gear, including cast nets, are technically prohibited on some HMS vessels due to authorized gear definitions, discussed below. Although

bait collection gear has not presented an enforcement and compliance issue, this action considers allowances for such gear that are too small and/or too weak to catch HMS.

Buoy gear:

NMFS authorized the use of buoy gear in the commercial swordfish handgear fishery in the HMS FMP (71 FR 58058, October 2, 2006). In that rule, buoy gear was defined as a type of handgear consisting of one or more floatation devices supporting a single mainline to which no more than two hooks or gangions are attached. Additionally, the 2006 rule authorized the use of buoy gear only by fishermen with a Swordfish Handgear or Directed limited access permit (LAP). Use of the gear resulted in an increasing number of participants in the Florida straits where large concentrations of swordfish are close to shore. The authorization of buoy gear also provided an alternative gear for commercial fishermen who had previously used pelagic longline within the East Florida Coast Closed Area before that area was closed to pelagic longline gear (65 FR 47214, August 1, 2000; 61 FR 8903, February 5, 2001). In Amendment 4 to the HMS FMP (77 FR 59842, October 1, 2012), NMFS created the HMS Commercial Caribbean Small Boat (CCSB) permit. These permit holders are allowed to fish for and sell bigeye, albacore, yellowfin, and skipjack (collectively known as BAYS) tunas, swordfish, and sharks in the U.S. Caribbean Region. These permit holders are also authorized to use buoy gear. Since that time, NMFS has created additional permits (*e.g.*, the Swordfish General Commercial permit). As a result, a number of interested parties have requested the authorization to use buoy gear with those other permits.

When buoy gear was first authorized, the regulations limited the gear to being retrieved by hand to remain consistent with other handline requirements. Because the gear was initially used primarily close to the surface, the hand retrieval requirement did not present operational concerns. However, the gear is now often deployed deeper in the water column. While it is possible to fish buoy gear by hand at deep depths, it can be difficult and dangerous to pull a thin mainline up to the surface from the depths. With these changes in how the gear is fished, a number of interested parties have requested changes to the buoy gear restrictions.

Speargun fishing gear:

In addition to buoy gear, NMFS also authorized speargun fishing gear in the recreational Atlantic tuna fisheries in the HMS FMP. At the time, it was not expected that the addition of speargun fishing for Atlantic BAYS tunas would disrupt existing rebuilding plans for overfished BAYS tunas given the number of participants in the recreational Atlantic tuna fisheries relative to the expected number of spearfishermen. Additionally, encounter rates were expected to be low for species targeted with speargun fishing gear. Overall, minimal increases in landings were expected, compared with the total landings by HMS Angling and Charter/Headboat category participants using other authorized gears. Since then, NMFS has heard from several interested parties who would like to use speargun fishing gear to fish for tunas commercially.

Bait collection:

The HMS FMP also clarified the differences between primary and secondary gears, and prohibited the use of secondary gears to capture free-swimming or undersized HMS. For all HMS fisheries, specific gear types and gear configurations (*i.e.*, primary gears) are authorized based on permit type and target species. Other gear types that are not explicitly authorized are

prohibited and may not be on board the vessel (§ 635.19(a)), with the exception of secondary gears (e.g., dart harpoons, gaffs, flying gaffs, and tail ropes) that may be used at boat side to aid and assist in subduing, or bringing on board a vessel, HMS that have first been caught or captured using primary gears. However, there are other gears for bait collection that may be commonly carried on board some fishing vessels that are not explicitly allowed in the HMS regulations and are not considered secondary gears. These bait collection gears are neither primary nor secondary gear, and, therefore, are prohibited under the current regulations. However, fishing gear that is used for bait collection (such as cast nets and small dipnets) is generally too small and/or too weak to target or fish for HMS. As a result, NMFS has received many requests to allow the use of those gears to collect bait.

1.3 PROPOSED ACTION, PURPOSE, AND NEED

Proposed Action: NMFS is considering alternatives to: (1) revise buoy gear regulations to modify requirements for gear deployment and retrieval, authorize this gear under additional permits, and authorize the targeting of additional species, (2) revise speargun fishing gear regulations to authorize this gear under additional permits and to authorize the targeting of additional species, and (3) modify fishing gear regulations to allow possession and use of small nets and other gear commonly used for bait collection on HMS fishing vessels.

Purpose: The purpose of this action is to provide increased flexibility and remove inefficiencies in fisheries targeting HMS, while still achieving fishery conservation and management goals, thus increasing fishing opportunities and the ability of HMS fisheries to achieve optimum yield on a continuing basis.

Need: Over the years, NMFS has implemented a number of gear-specific management measures to support fishery conservation and management goals. However, HMS fishing gear and techniques have evolved over time, and some management measures may need to be updated to better achieve those goals.

1.4 SCOPE AND ORGANIZATION OF THIS DOCUMENT RELATED TO THE NATIONAL ENVIRONMENTAL POLICY ACT

In considering this proposed action, NMFS must comply with a number of federal statutes and executive orders, including NEPA (42 U.S.C. 4321 *et seq.*). To comply with these requirements and eliminate redundancies to the extent practicable, NMFS consolidates all the requirements into one comprehensive document. For this action, Chapter 4 of this document, in addition to other sections as referenced within Chapter 4, should be considered the Environmental Assessment (EA) required under NEPA. The purpose of an EA is to provide sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement (EIS) or a finding of no significant impact (FONSI) and to aid in the agency's application of NEPA when no EIS is necessary.

In developing the EA, NMFS adhered to the procedural requirements of NEPA, as amended, and NAO 216-6A with its accompanying Companion Manual. Consistent with the procedures laid out in the Companion Manual, this document focuses on whether the environmental effects of the proposed action are significant. Effects or impacts refer to changes to the human environment from the proposed action or alternatives that are reasonably foreseeable and have a reasonably

close causal relationship to the proposed action or alternatives. Effects can include ecological, aesthetic, historic, cultural, economic, social, or health effects. They can be beneficial or adverse or both. Effects that are remote in time, geographically remote, or the product of a lengthy causal chain are not included. Additionally, effects do not include those effects that NMFS has no ability to prevent due to the limits of its regulatory authority, that would occur regardless of the proposed action, or that would need to be initiated by a third party.

Additionally, in developing the scope of the EA, NMFS focused on substantive issues that meaningfully inform the consideration of environmental effects and the resulting decision on how to proceed while eliminating from further study non-substantive issues. NMFS also confirms that the proposed activity in this action is not part of a larger NMFS action, and can therefore be reviewed independently from other actions under NEPA.

1.5 SCOPE AND ORGANIZATION OF THIS DOCUMENT RELATED TO OTHER APPLICABLE LAWS AND EXECUTIVE ORDERS

As described above, when considering this proposed action, NMFS consolidated the analyses and discussion for all the requirements and laws that NMFS must comply with into one comprehensive document. Thus, this consolidated document considers, in addition to the application of NEPA as described above, the requirements under all relevant statutes and executive orders including the Magnuson-Stevens Act, Executive Order 12866 (E.O. 12866, Regulatory Planning and Review), and the Regulatory Flexibility Act (RFA). For this action, in addition to any references stated within the chapters, Chapter 5 addresses the requirements under E.O. 12866, also known as the Regulatory Impact Review; Chapter 6 provides the Initial Regulatory Flexibility Analysis (IRFA) required under RFA; and Chapter 7 provides additional consistency information that is required under specific sections of the Magnuson-Stevens Act and other statutes such as the Coastal Zone Management Act, the Paperwork Reduction Act, and those regarding protected resources. While NMFS wrote some of the chapters to comply with the specific requirements under these various statutes and executive orders, it is the document as a whole that meets all the federal requirements and not any individual chapter.

2 Summary of the Alternatives Considered

A number of federal requirements, such as NEPA, E.O. 12866, and the RFA, require a consideration of reasonable alternatives. This chapter lists and defines the alternatives that we considered. These alternatives were designed to meet the purpose and need for the action (see Section 1.3), meet all the requirements under the multiple federal requirements, and include a “no action” alternative. To the extent needed, this chapter explains how the specific requirements of an alternative were derived. Additional descriptions and supporting analyses of any effects of these alternatives are provided in later chapters of this document.

When developing the alternatives listed below, we considered the following screening criteria to determine whether an alternative is reasonable:

- An alternative must be consistent with the Magnuson-Stevens Act, including the 10 National Standards set forth in the Magnuson-Stevens Act.
- An alternative must be administratively feasible. The costs associated with implementing an alternative cannot be prohibitively exorbitant or require unattainable infrastructure.
- An alternative cannot violate any laws (*e.g.*, ESA, MMPA).
- An alternative must be consistent with the HMS FMP and its amendments.
- An alternative must be consistent with ICCAT recommendations as implemented by NMFS under ATCA.

2.1 ALTERNATIVES FOR BUOY GEAR MANAGEMENT MEASURES

NMFS is considering seven alternatives related to buoy gear regulations in HMS fisheries.

Alternative A1: Maintain the current buoy gear regulations – No Action

Under Alternative A1, NMFS would maintain the current buoy gear regulations. Current regulations require buoy gear to be released and retrieved by hand, and buoy gear may only be used to target swordfish under a Swordfish Handgear LAP, Swordfish Directed LAP (only valid with an Atlantic Tunas Longline category LAP and a Shark Directed LAP or Shark Incidental LAP), or an HMS CCSB permit. Those holding HMS CCSB permits may also retain BAYS tunas caught on buoy gear. No other permits authorize the use of buoy gear, and no other HMS can be targeted with the gear type. Additionally, vessels utilizing buoy gear are limited to possessing or deploying no more than 35 floatation devices supporting a single mainline to which no more than two hooks or gangions are attached.

Alternative A2: Authorize the use of power assistance for buoy gear (e.g., hydraulic, electric) – Preferred Alternative

Under Alternative A2, a preferred alternative, NMFS would authorize the use of power assistance for the deployment and retrieval of buoy gear mainline. This could include hydraulic or electric systems, similar to electric reels used with rod and reel or to hydraulic power used with bandit rigs.

Alternative A3: Authorize buoy gear use under the Swordfish General Commercial permit; maintain the 35-buoy limit

Under Alternative A3, NMFS would authorize the use of buoy gear to target swordfish under the open access Swordfish General Commercial permit. Permit holders using buoy gear would need to be consistent with the existing retention limits for the Swordfish General Commercial permit including the zero swordfish limit in the Florida Swordfish Management Area. Under this alternative, NMFS would maintain the 35-buoy limit for the possession or deployment of buoys, consistent with current buoy gear requirements.

Alternative A4: Authorize buoy gear use under the Swordfish General Commercial permit; establish a 5-buoy limit – Preferred Alternative

Under Alternative A4, NMFS would authorize the use of buoy gear to target swordfish under the open access Swordfish General Commercial permit. However, under this alternative, Swordfish General Commercial permit holders would be limited to possessing on board or deploying up to five buoys. Current buoy gear regulations for Swordfish Handgear LAP, Swordfish Directed LAP, and HMS CCSB permit holders allow for 35 buoys. However, limiting the number of buoys per vessel to five under this alternative is an appropriate approach for an open access permit held by a larger number of vessels. Initially limiting to five buoys per vessel would allow for the new gear to be introduced to a new group of commercial fishing vessels and data to be collected before considering a higher number of buoys per vessel in the future. Limiting the number of buoys to five per vessel would reduce the amount of additional gear in the water and may be especially appropriate given the free-floating nature of individual buoy gears which can be more challenging to keep track of. The 35-buoy limit for Swordfish Handgear LAP, Swordfish Directed LAP, and HMS CCSB permit holders would not change.

Alternative A5: Authorize buoy gear use under the Swordfish Incidental LAP; maintain the 35-buoy limit

Under Alternative A5, NMFS would authorize the use of buoy gear to target swordfish under the Swordfish Incidental LAP (only valid with an Atlantic Tunas Longline category LAP and a Shark Directed LAP or Shark Incidental LAP). Consistent with current Swordfish Incidental LAP requirements, the swordfish retention limit for these permit holders would remain at 30 fish per vessel per trip. NMFS would maintain the 35-buoy limit for the possession or deployment of buoys, consistent with current buoy gear requirements.

Alternative A6: Authorize the retention of BAYS tunas caught on buoy gear dependent on permit type – Preferred Alternative

Under Alternative A6, a preferred alternative, NMFS would authorize the retention of BAYS tunas caught on buoy gear by persons who hold the following combinations of commercial limited access swordfish and tuna permits: Swordfish Directed LAP with an Atlantic Tunas Longline category permit or a Swordfish Handgear LAP with an Atlantic Tunas General category permit. Currently, fishing for, retaining, or possessing BAYS tunas with buoy gear is

authorized only under an HMS CCSB permit (which is valid in the U.S. Caribbean only). NMFS would also maintain the 35-buoy limit for the possession or deployment of buoys by the newly-authorized permit holders consistent with current buoy gear requirements.

Alternative A7: Authorize the retention of allowable shark species caught with buoy gear dependent on permit type – Preferred Alternative

Under Alternative A7, a preferred alternative, NMFS would authorize the retention of allowable shark species caught on buoy gear by persons holding a Shark Directed LAP, a Shark Incidental LAP, a Smoothhound Shark permit, or an HMS CCSB permit (valid in the U.S. Caribbean only). Retention limits and allowable shark species in existing regulations remain unchanged for these permits. These shark species could be retained if caught with buoy gear and would be accounted for under the appropriate commercial quotas, which are being underutilized. NMFS would maintain the 35-buoy limit for the possession or deployment of buoys, consistent with current buoy gear requirements, with one exception. Alternative A4 limits the number of buoys per vessel to five because the Swordfish General Commercial permit is an open access permit with a relatively larger number of permit holders. If Alternative A4 is adopted, permit holders that have both one of the shark permits listed above and a Swordfish General Commercial permit would be limited to 5 buoys; all other permit combinations would be limited to 35 buoys.

2.2 ALTERNATIVES FOR SPEARGUN FISHING GEAR MANAGEMENT MEASURES

NMFS is considering three alternatives related to speargun fishing gear regulations in HMS fisheries.

Alternative B1: Maintain current speargun fishing gear regulations – No Action

Under Alternative B1, NMFS would maintain current speargun fishing gear regulations, which authorize the harvest of BAYS tunas only in recreational fisheries, under the HMS Angling permit or the HMS Charter/Headboat permit (when fishing recreationally). Under current regulations, this gear is defined as a muscle-powered speargun equipped with a trigger mechanism, a spear with a tip designed to penetrate and retain fish, and terminal gear. The operator needs to be in the water when using this gear.

Alternative B2: Authorize the retention of BAYS tunas caught with speargun fishing gear for some commercial tuna permit holders, consistent with permit retention and size limits – Preferred Alternative

Under Alternative B2, a preferred alternative, NMFS would authorize the use of speargun fishing gear to retain and sell BAYS tunas for entities that hold the following commercial permits: the Atlantic Tunas General category permit, the HMS Charter/Headboat permit (with a commercial endorsement and on non-for-hire trips only), and the HMS CCSB permit (valid in the U.S. Caribbean only). Existing regulations regarding the sale of landed fish would be maintained.

Alternative B3: Authorize the retention of Atlantic bluefin tuna (BFT) caught with speargun fishing gear for recreational tuna permit holders, consistent with permit retention and size limits

Under Alternative B3, NMFS would authorize the use of speargun fishing gear for the recreational retention of BFT for entities that hold the following permits: the HMS Angling permit and HMS Charter/Headboat permit (when fishing recreationally). Any BFT caught under this alternative could not be sold by the permit holder.

2.3 ALTERNATIVES FOR BAIT COLLECTION GEAR MANAGEMENT MEASURES

NMFS is considering two alternatives related to bait collection gear in HMS fisheries.

Alternative C1: Maintain current regulations that do not allow possession and use of small nets and other gear commonly used for bait collection on board HMS fishing vessels – No action

Under Alternative C1, NMFS would maintain the current primary and secondary gear regulations. Across HMS regulations, specific gear types and gear configurations are authorized based on permit type and target species. Under current regulations, fishing gear used for bait collection (*e.g.*, cast nets and small dipnets) is not allowed on board HMS fishing vessels.

Alternative C2: Allow possession and use of small nets and other gear commonly used for bait collection on board HMS fishing vessels – Preferred Alternative

Under Alternative C2, the preferred alternative, NMFS would modify the regulations to allow possession and use of small nets and other gear commonly used for bait collection gear (*e.g.*, cast nets and small dipnets) on board HMS fishing vessels, provided the gear is small enough that it is incapable of capturing HMS. Note that this alternative would not change the bait requirements for specific gears (*e.g.*, use of whole Atlantic mackerel and/or squid bait when using pelagic longline gear in the NED; no live bait on board pelagic longline vessels in the Gulf of America; no natural bait with J-hooks by anglers fishing for billfish in a tournament). Rather, this alternative would simply clarify that the use of bait collection gear on HMS fishing vessels is allowed.

3 Affected Environment

This chapter describes the affected environment (*e.g.*, the biology of managed HMS, the fisheries involved, the gears used, and the communities involved) relative to the management measures under consideration. This chapter provides an overview of the current conditions of the fisheries, which serve as baselines against which to compare potential effects of the different alternatives.

3.1 BIOLOGY AND LIFE HISTORIES, MANAGED HMS

NMFS manages over 50 species of Atlantic tunas, swordfish, billfish, and sharks. NMFS expects that the preferred alternatives in this action could primarily affect BAYS tunas, BFT, swordfish, and sharks. The life histories for all managed HMS, including those that could be affected by the various alternatives considered in this document (listed in Chapter 2), are described in detail in the HMS FMP.² Additional information about managed HMS, including life histories, distribution, and habitat associations is generally included in Chapter 3 of the HMS FMP and its subsequent amendments. In particular, Amendment 10 to the HMS FMP (82 FR 42329, September 7, 2017) (Amendment 10) addressed essential fish habitat (EFH) for Atlantic HMS and contains detailed descriptions of life history profiles for HMS. Biology and life history information from the aforementioned sources is not repeated here. NMFS recently announced their intent to initiate Amendment 17 to the HMS FMP to update HMS EFH descriptions and designations, following completion of the Final HMS EFH 5-Year Review (89 FR 27716, April 18, 2024). NMFS will announce any changes to EFH for Atlantic HMS in Amendment 17 to the HMS FMP.

3.2 HABITAT

HMS can be found in a variety of habitats from coastal waters to the open ocean. The Magnuson-Stevens Act requires NMFS to identify and describe EFH for the fishery (§ 303(a)(7)). As part of this requirement, NMFS first must review which habitats are essential for spawning, growing, and living in order to define which habitat is essential or EFH. NMFS must then evaluate the potential adverse effects of fishing activities on EFH, including the cumulative effects of multiple fisheries activities (50 CFR 600.815). NMFS has described EFH numerous times over the years. HMS EFP can be viewed online using the EFH Mapper.³

Habitat information from the aforementioned sources is incorporated by reference and not repeated here.

3.3 STOCK STATUS

The Magnuson-Stevens Act (§ 3(34)) defines both “overfishing” and “overfished” to mean a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce maximum sustainable yield (MSY) on a continuing basis. The National Standard 1 (NS1) guidelines section on stock status determination criteria (SDC) clarifies that “overfished” relates to biomass of a

² The HMS FMP and its amendments are available at <https://www.fisheries.noaa.gov/atlantic-highly-migratory-species/atlantic-hms-fishery-management-plans-and-amendments>.

³ The EFH Mapper is available at <https://www.fisheries.noaa.gov/resource/map/essential-fish-habitat-mapper>.

stock or stock complex, and “overfishing” pertains to a rate or level of removal of fish from a stock or stock complex” (50 CFR § 600.310(e)(2)(i)(A)).

Table 3.1 below provides the overfished and overfishing status for the swordfish, tuna, and shark species discussed in this document. Additional information on the SDC, thresholds used to determine the stock status, and information on the stock status for HMS, is presented in Chapter 2 of the HMS Stock Assessment and Fishery Evaluation (SAFE) Report (NMFS 2023).⁴

Table 3.1. Stock status for swordfish, tuna, and shark species

Swordfish and Tuna Species	Overfished status	Overfishing status
North Atlantic swordfish, Atlantic bigeye tuna, North Atlantic albacore tuna, Atlantic yellowfin tuna, western Atlantic skipjack tuna	Not overfished	No overfishing occurring
Western Atlantic bluefin tuna	Unknown	No overfishing occurring
Shark Species	Overfished status	Overfishing status
Atlantic sharpnose (Atlantic and Gulf stocks), Blacktip (Atlantic and Gulf stocks), Finetooth, North Atlantic blue	Not overfished	No overfishing occurring
Northwest Atlantic porbeagle, Sandbar	Overfished	Overfishing is not occurring
Blacknose (Atlantic stock), Scalloped Hammerhead	Overfished	Overfishing is occurring
Blacknose (Gulf stock), Bonnethead (Atlantic and Gulf stocks), Bull, Common thresher, Great Hammerhead, Lemon, Nurse, Silky, Smooth Hammerhead, Spinner, Tiger	Unknown	Unknown

Source: SAFE Report (NMFS 2023), SCRS 2025.

3.4 BUOY GEAR FISHERY BACKGROUND

Buoy gear is defined in the regulations as handgear and is authorized for use under certain fishing permits for swordfish, as described below. The commercial buoy gear swordfish fishery exists chiefly in the Florida Swordfish Management Area, which covers the east coast of Florida and the Florida straits south of approximately Cocoa Beach, Florida (Figure 3.1). Commercial buoy gear swordfish fishing occurs less frequently in other locations of the Atlantic, Gulf, and U.S. Caribbean. Buoy gear is generally used at night when swordfish are near the water’s surface, although it is increasingly being used during the day with deeper sets when swordfish are found at deep depths.

⁴ HMS SAFE Reports are available at <https://www.fisheries.noaa.gov/atlantic-highly-migratory-species/atlantic-highly-migratory-species-stock-assessment-and-fisheries-evaluation-reports>.

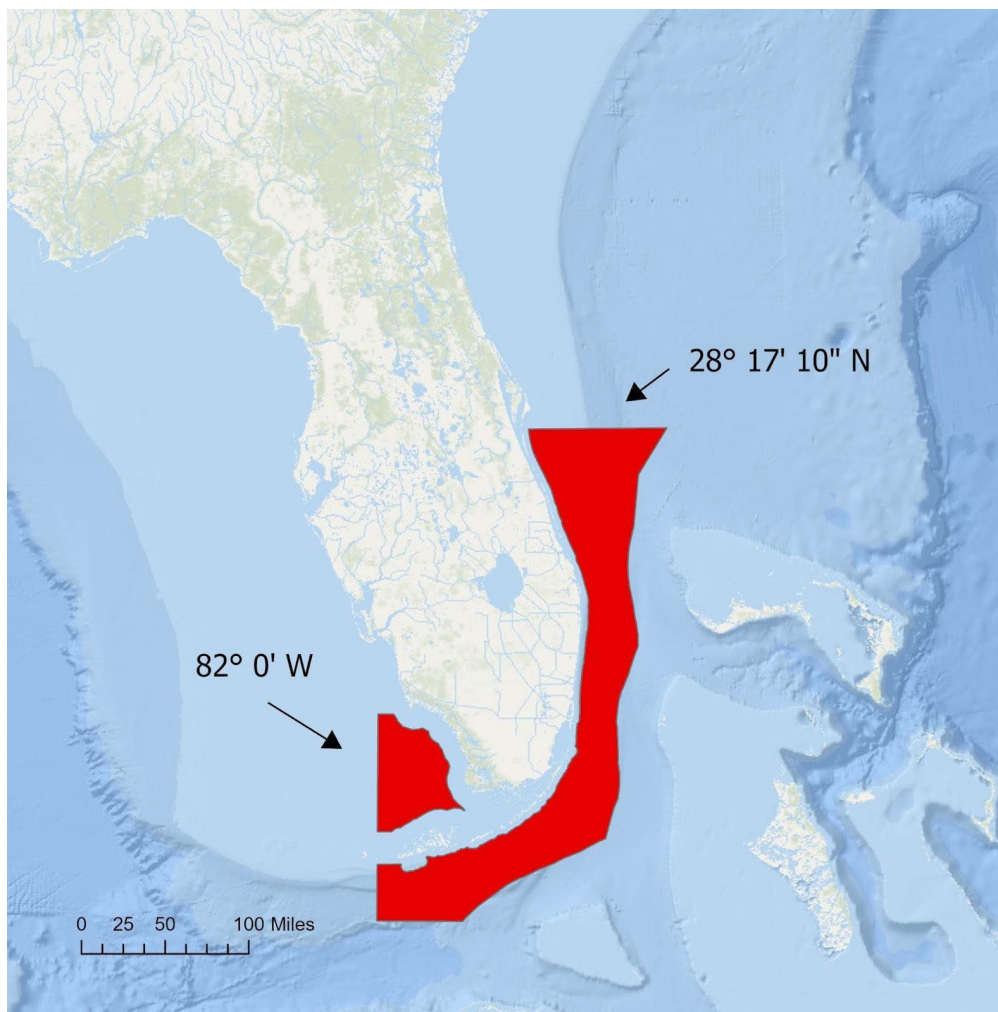


Figure 3.1 Map of Florida Swordfish Management Area. The management area, shown in red, covers the east coast of Florida and the Florida straits south of approximately Cocoa Beach, Florida.

Since 2006, hand deployment and retrieval requirements have been in place for buoy gear. Prior to 2006, buoy gear was categorized as handline, which was deployed and retrieved by hand. This requirement separated buoy gear from other gear types that can be retrieved by power assistance (*i.e.*, pelagic or bottom longline).

Buoy gear consists of one or more floatation devices supporting a single mainline, to which no more than two hooks or gangions are attached (Figure 3.2). Authorized permit holders may not possess or deploy more than 35 floatation devices and may not deploy more than 35 individual buoy gears per vessel. Buoy gear must be constructed and deployed so that the hooks and/or gangions are attached to the vertical portion of the mainline. Floatation devices may only be attached to one end of the mainline, and no hooks or gangions may be attached to any floatation device or horizontal portion of the mainline. If more than one floatation device is attached to a buoy gear, no hook or gangion may be attached to the mainline between them. Individual rigs of buoy gear may not be linked, clipped, or connected together in any way. Buoy gear must be released and retrieved by hand. All deployed buoy gear must have some type of affixed monitoring equipment, such as radar reflectors, beeper devices, lights, or reflective tape. If only

reflective tape is affixed, the vessel deploying the buoy gear must possess on board an operable spotlight capable of illuminating deployed floatation devices. If a gear monitoring device is positively buoyant and rigged to be attached to a fishing gear, it is included in the 35-floatation device vessel limit and must be marked appropriately.

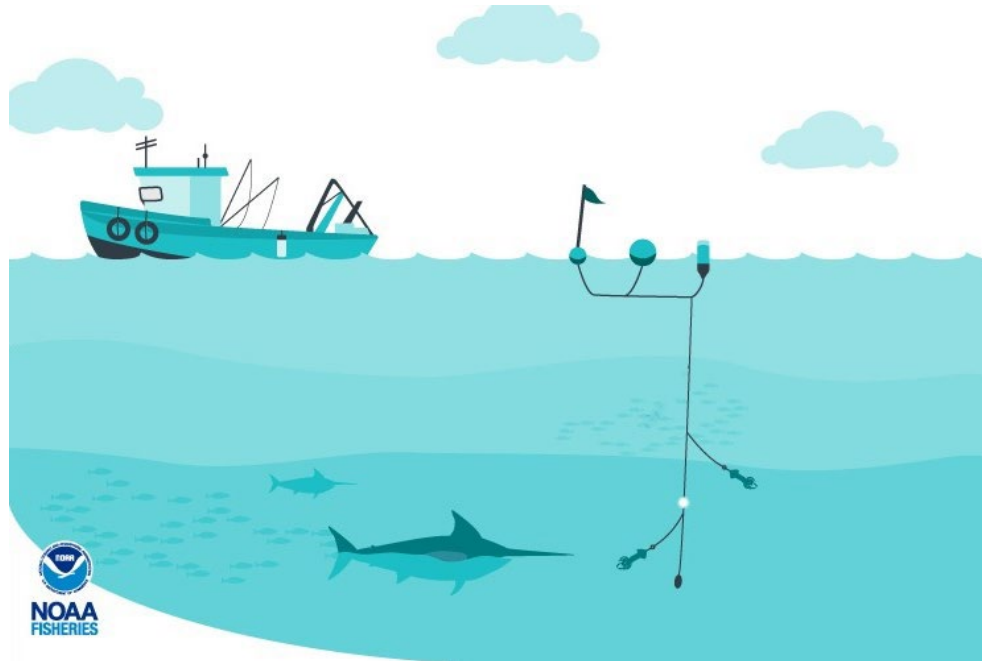


Figure 3.2 Typical U.S. buoy gear.

Buoy gear is primarily used by vessels fishing using a Swordfish Handgear LAP and may also be used aboard vessels issued a Swordfish Directed LAP (along with an Atlantic Tunas Longline category LAP and a Shark Directed LAP or Shark Incidental LAP). There were approximately 79 Swordfish Handgear permits and 167 Swordfish Directed permits as of December 2024. When used with these permits, buoy gear is authorized for swordfish fishing only. An HMS CCSB permit (valid in the U.S. Caribbean only) also authorizes fishermen in the U.S. Caribbean to fish for and retain swordfish using buoy gear. Fishermen operating in the U.S. Caribbean under an HMS CCSB permit may also retain a limited number of BAYS tunas using buoy gear. Fishermen in the U.S. Caribbean should also be aware of territorial fishing permits and other requirements that may apply. As of December 2024, there were 120 HMS CCSB permits.

The use of buoy gear is largely concentrated off the east coast of Florida, particularly south of Cape Canaveral. In 2024, 44 vessels reported using buoy gear. These vessels were based primarily in southeastern Florida (Table 3.2). Buoy gear is occasionally used in other areas, specifically off the west coast of Florida, Alabama, and Louisiana in the Gulf, and Massachusetts, New Jersey, and North Carolina in the Atlantic. The gear is also used in the U.S. Caribbean, but data on buoy gear use in that area are sparse. The swordfish buoy gear fishery is likely concentrated in the South Florida area for two reasons. First, prime swordfish habitat (deep oceanic water and the Gulf Stream) is close to the South Florida coast, an area with a highly concentrated human population where fishermen are numerous. In other areas, swordfish habitat is further from shore, requiring longer transit times to reach fishing grounds. Second, and relatedly, horsepower upgrade restrictions attached to the Swordfish Handgear LAPs, the

predominant permit used in the fishery, limit the ability of vessels to reach offshore fishing grounds. When buoy gear is used to target swordfish outside of the South Florida region, fewer buoys are deployed per trip (Table 3.3).

Table 3.2 Number of Vessels Reporting the Use of Buoy Gear by Area, 2020 – 2024.

Area	Vessels/Trips	2020	2021	2022	2023	2024
Florida - East Coast	Vessels	54	50	51	40	40
	Trips	792	796	746	592	480
Other (Florida - West Coast, Massachusetts, New Jersey, North Carolina, Alabama, and Louisiana)	Vessels	10	11	11	5	4
	Trips	29	38	28	7	10

Source: Fisheries Logbook System

Table 3.3 Average Number of Buoys Deployed per Trip, 2020 – 2024.

Area	2020	2021	2022	2023	2024
Florida - East Coast	29	30	32	34	35
Other (Florida - West Coast, Massachusetts, North Carolina, and Louisiana)	13	15	12	17	23

Source: Fisheries Logbook System

Swordfish catch in the buoy gear fishery is similarly concentrated off the east coast of south Florida (Table 3.4). Regardless of fishing location, buoy gear appears to have low rates of bycatch and incidental catch. Based on fisheries logbook data, for 2020 through 2024, swordfish made up over approximately 82 percent of buoy gear catch by numbers with no catch of protected resources (Table 3.5). Some prohibited sharks were caught including night and white sharks, though over 80 percent of those individuals were released alive. Buoy gear is a tended gear with fishermen watching for indications of a hooked fish, which they may then quickly retrieve to maintain fish quality. For this reason, bycatch and incidentally caught species are often released quickly, as live releases. These low bycatch rates were also observed during the Deepwater Horizon Oceanic Fish Restoration Project. This project tested alternative gear types in the Gulf, including buoy gear, and found that dead discard rates in alternative gear types, including buoy gear, were significantly lower than pelagic longline dead discard rates (Kerstetter 2020). Additionally, high selectivity for swordfish off the southern coast of California has been shown to be associated with the daytime use of deep-set gear (Sepulveda and Aalbers 2018, Sepulveda *et al.*, 2014). Sepulveda and Aalbers' (2018) California research demonstrated that over 80 percent of catch was swordfish (a higher selectivity than longline and drift gillnet fisheries), while approximately 16 percent was bigeye thresher shark which was either marketed or released alive.

Table 3.4 Swordfish Landings (lb dw) in the Buoy Gear Fishery by Area, 2020 - 2024

Area	2020	2021	2022	2023	2024
Florida - East Coast	296,939	363,018	288,571	230,682	221,291
Other (Florida-West Coast, Massachusetts, North Carolina, and Louisiana)	11,282	7,773	5,940	1,798	1,598
Total	308,221	370,791	294,511	232,480	222,889

Source: Fisheries Logbook System

Table 3.5 Reported Catch and Bycatch (Number) by Year Across all Areas, 2020 - 2024

Species	2020	2021	2022	2023	2024	Total	Percent of Total
Swordfish	5,152	5,981	5,198	3,581	3,178	23,090	82 %
BAYS tunas	13	332	366	4	2	717	3 %
Bluefin tuna	0	0	0	0	2	2	<1 %
Pelagic sharks	20	490	216	20	12	758	3 %
Large coastal sharks	343	801	596	192	67	1,999	7 %
Prohibited sharks (predominantly live release of night and white sharks - 80%)	166	310	219	118	82	895	3 %
Billfish	9	0	0	1	0	10	<1 %
Other (predominantly blackfin tuna and dolphinfish - 11% and 85%)	145	475	27	51	41	739	3 %
Marine Mammals	0	0	0	0	0	0	0 %
Sea Turtles	0	0	0	0	0	0	0 %

Source: Fisheries Logbook System.

Some of the buoy gear alternatives in this action (the A alternatives) consider authorizing the use of buoy gear under additional permits. The use of buoy gear would be authorized for Swordfish General Commercial permit holders under Alternatives A3 and A4 and Swordfish Incidental LAP holders under Alternative A5. Alternative A6 would authorize buoy gear for the targeting and retention of BAYS tuna by Atlantic Tunas General category permit and Atlantic Tunas Longline category LAP holders and Alternative A7 would authorize buoy gear for some shark species by Shark Directed LAP, Shark Incidental LAP, Smoothhound Shark, and HMS CCSB permit holders. In 2024, there were 619 Swordfish General Commercial, 66 Swordfish Incidental LAP, 2,489 Atlantic Tunas General category, 229 Atlantic Tunas Longline category LAP, 204 Shark Directed LAP, 233 Shark Incidental LAP, 4,247 HMS Charter/Headboat, and 120 HMS CCSB permit holders that could be impacted by the A alternatives.

3.5 SPEARGUN FISHING GEAR FISHERY

In the HMS FMP, the use of speargun fishing gear was authorized in recreational HMS fisheries, under the HMS Angling or HMS Charter/Headboat permits. BAYS tunas were the only authorized species, due to stock status concerns (*i.e.*, stocks were overfished with overfishing occurring) for bluefin tuna, swordfish, and some large coastal sharks. However, the HMS FMP stated that NMFS may reconsider the use of speargun fishing gear in other fisheries as stock status improves and other factors change. At this time, the stock status for many of these species, and the fisheries that target them, have changed. More information about current stock statuses for these species may be found in Section 3.3.

Under HMS regulations, speargun fishing gear is defined as a muscle-powered speargun equipped with a trigger mechanism, a spear with a tip designed to penetrate and retain fish, and terminal gear. The regulations further clarify that terminal gear may include, but is not limited to, trailing lines, reels, and floats, and that the speargun must use potential energy provided from the operator's muscles and can include energy from compressed air and springs or the stretching of rubber bands. Additionally, the speargun operator must be physically in the water when using this gear, and may freedive, use a self-contained underwater breathing apparatus (SCUBA), or other underwater breathing devices. Currently, the use of speargun fishing gear to target HMS is authorized only in the recreational and Charter/Headboat BAYS tuna fisheries, and occurs only in deep water.

There are no reporting requirements for HMS Angling or HMS Charter/Headboat permit holders recreationally landing BAYS tunas with speargun fishing gear. Thus, there is no data on the number of individuals using this gear nor catch rates. However, based on conversations with constituents, very few permit holders use this gear type.

3.6 BAIT COLLECTION GEAR BACKGROUND

Across HMS regulations, specific gear types and gear configurations are authorized based on permit type and target species. Primary gears (*e.g.*, longline, gillnet, and handgear) must be used to initially catch HMS. The regulations also allow for secondary gears, which are gears that are used at boat side to aid and assist in subduing, or bringing on board a vessel, any HMS that has initially been caught or captured using primary gears. Examples of secondary gears include dart harpoons, gaffs, flying gaffs, and tail ropes. Any other gear types are prohibited and may not be on board the vessel. However, there are other gears for bait collection (*e.g.*, cast nets and small dipnets) that may be commonly carried on board some HMS fishing vessels. These gears are generally too small and/or too weak to capture or fish for HMS.

3.7 ECONOMIC ENVIRONMENT

Landings weight and price for most HMS are collected from reports through NMFS' electronic dealer reporting program, eDealer. For Atlantic bluefin tuna, landings weight and revenue are collected through the electronic bluefin tuna dealer landings reporting system, known as eBFT. Table 3.6 summarizes the average annual revenues of HMS fisheries based on average ex-vessel prices (monetary value of commercial landings) from 2020 through 2024. These values indicate that the estimated total annual revenue of Atlantic tuna, swordfish, and sharks have remained

consistent over the years and these species account for a majority of the total HMS annual revenue.

Table 3.6 Estimated Ex-Vessel Annual Revenues in HMS fisheries, 2020 - 2024

Species	2020 (\$)	2021 (\$)	2022 (\$)	2023 (\$)	2024 (\$)
Total tuna	19,473,853	27,917,311	28,105,031	27,169,523	28,105,031
Total swordfish	9,248,741	9,477,075	10,728,852	7,268,029	10,728,852
Total sharks	2,219,348	2,625,144	2,299,904	2,488,144	2,299,904
Total HMS	30,941,942	40,019,500	41,133,788	36,925,696	41,133,788

Source: eDealer for bigeye, albacore, yellowfin, and skipjack tunas, and swordfish; eBFT for bluefin tuna.

The primary expenses associated with operating an HMS-permitted buoy gear commercial vessel include labor, fuel, bait, ice, groceries, and other miscellaneous expenses. These expenses are reported in the Southeast Coastal Fisheries Logbook for vessels that have been selected for reporting economic information. Buoy gear trips primarily target swordfish and are of short duration. Table 3.7 shows the median input costs for buoy gear fishing trips from 2020 through 2024. Bait is an important expense for each HMS commercial fishing trip. Table 3.8 shows the median input costs for bait by gear types for HMS fishing trips. NMFS does not collect any specific speargun fishing gear or bait collection economic data. For additional information on overall HMS fishery economic status, please see Chapter 8 of the HMS SAFE Report (NMFS 2023).

Table 3.7. Median Input Costs for Buoy Gear Vessel Trips, 2020 - 2024

Input Costs	2020 (\$)	2021 (\$)	2022 (\$)	2023 (\$)	2024 (\$)
Fuel	150	240	368	320	350
Bait	100	120	57	143	73
Grocery expenses	50	35	40	50	50

Source: United Data Processing.

Table 3.8 Median Input Cost for Bait by Fishing Gear, 2020 - 2024

Input Costs	2020 (\$)	2021 (\$)	2022 (\$)	2023 (\$)	2024 (\$)
Buoy	100	120	57	143	73
Pelagic Longline	1,920	3,313	5,634	3,577	3,600
Bottom longline	120	109	215	96	105

Source: United Data Processing.

4 Draft Environmental Assessment

As described in section 1.4, this chapter should be considered the EA required under NEPA. In developing this EA, NMFS adhered to the procedural requirements of NEPA as amended by the 2023 Fiscal Responsibility Act and the NAO 216-6A with its Companion Manual. Consistent with the procedures laid out in the Companion Manual, this document focuses on whether the environmental effects of the proposed action are significant.

For tracking purposes, the unique identification number for this EA is: EAXX-006-48-1HQ-1774402440.

4.1 PURPOSE AND NEED FOR THE PROPOSED AGENCY ACTION

As described in section 1.3 of this document, NMFS is considering changes to several gear regulations for the purpose of providing increased flexibility and removing inefficiencies in fisheries targeting HMS, while still achieving fishery conservation and management goals. These changes should increase fishing opportunities and improve the ability of HMS fisheries to achieve optimum yield. This action is needed because over the years, HMS fishing gears and techniques have evolved over time, and some management measures may need to be updated to better achieve the goals of the Magnuson-Stevens Act and the HMS FMP and its amendments.

4.2 ALTERNATIVES CONSIDERED

As described in Chapter 2, NMFS developed various alternatives to consider regarding revisions to HMS fishing gear regulations, specifically buoy gear, speargun fishing gear, and bait collection gear. As described in Chapter 2, these alternatives would apply throughout the areas where the relevant fisheries currently occur, meet the screening criteria presented in Chapter 2, and, for the purposes of NEPA, are considered to be a reasonable range of alternatives for this proposed action. This section includes an analyses of the no action alternatives and the alternatives that are technically and economically feasible while also meeting the purpose and need of the proposal. The effects of implementing these alternatives are also described below. While the alternatives are briefly described below, more information on the specifics regarding what each alternative entails can be found in Chapter 2.

4.2.1 Impacts of Alternatives for Buoy Gear Management Measures

NMFS is considering seven alternatives regarding buoy gear. Chapter 2 fully describes each alternative; those descriptions are summarized here. Chapter 3 describes the affected environment, including the HMS buoy and speargun fisheries, background on bait collection gear, status of the stocks, and economic environment that NMFS considered in evaluating these alternatives.

4.2.1.1 Ecological Evaluation

Alternative A1: Maintain the current buoy gear regulations – No Action

Under Alternative A1, the No Action alternative, NMFS would maintain the current buoy gear regulations. As such, under this alternative, there would be no change to current regulations, catch rates, or fishing locations. Additionally, fishing effort would not be expected to change.

Because this alternative would not change anything, the short- and long-term ecological impacts to target species, specifically swordfish, would be neutral, meaning it would have neither a positive nor negative outcome. Similarly, the short- and long-term ecological impacts to bycatch species, incidentally caught species, and habitat is expected to be neutral.

Alternative A2: Authorize the use of power assistance for buoy gear (e.g., hydraulic, electric) - Preferred Alternative

As described in Chapter 2, Alternative A2 would allow the use of power assistance for releasing and retrieving buoy gear.

Short- and long-term ecological impacts to swordfish, which is the target species, would be neutral under Alternative A2. While an increase in catch rates and fishing effort would likely lead to an increase in swordfish catch, such an increase would be unlikely to increase past sustainable levels. The North Atlantic swordfish stock is healthy and current landings are far below the scientifically derived quota. In 2022, ICCAT's Standing Committee Research and Statistics (SCRS) updated the stock assessment and determined that the stock is healthy (not overfished and not experiencing overfishing). Based upon those results, ICCAT developed a management procedure that produced an Atlantic-wide total allowable catch (TAC) for North Atlantic swordfish, of which 2,937.5 metric tons (mt) dressed weight (dw) was allocated to the United States. Neither the TAC nor the U.S. allocation has been fully harvested in a number of years. Thus, increased landings should not jeopardize the health or sustainability of the stock, and a modest increase in landings and fishing mortality is unlikely to have any direct ecological impacts.

Similarly, Alternative A2 would likely result in neutral short and long-term ecological impacts to bycatch species, incidentally caught species, protected resources (including sea turtles, sharks listed under the ESA, or marine mammals), and habitat. With any increase in effort, there is likely to be an increase in interactions with bycatch, protected resources, and incidental catch of non-target species. However, buoy gear primarily catches swordfish and has low bycatch and incidental catch. As detailed in Section 3.4.1, pelagic logbook data from 2020 through 2024 indicates that approximately 82 percent of fish caught on buoy gear are swordfish. No catch of marine mammals or sea turtles were reported during that time. The use of power assistance is unlikely to change the selectivity of the gear. Additionally, any increased efficiency achieved through the use of power assistance could reduce the time on the line for hooked fish or any other animal that is caught, which in turn could result in increased post-release survival.

Furthermore, increased use of the deep-set buoy gear technique as a result of power assistance may not lead to a proportional increase in the number of hooks deployed (NMFS does not anticipate a large adoption of power assistance for shallow-set buoy gear). First, this alternative does not change the overall maximum number of buoys and hooks allowed on the vessel. Second, buoy gear research indicates that the number of buoys deployed on deep-set trips (which is when power assistance is most needed) is lower than the number deployed on surface trips. While surface trips often deploy 20 to 30 buoys, deep-set trips deploy fewer buoys (approximately 15 buoys), likely due to the increased time and effort to deploy and retrieve the gear deeper in the water column (Kerstetter 2020, Braun pers. comm.). While power assistance

may reduce the overall time needed to retrieve deep-set buoy gear, the time needed to retrieve deep-set buoy gear would still be longer than the time needed to retrieve shallow-set buoy gear. For these reasons, we expect that the number of hooks deployed on deep-set trips could be reduced by up to half compared with shallow-set trips.

Buoy gear is not fished in a manner that contacts the sea floor, thus no impacts to bottom habitats are expected.

Alternative A3: Authorize buoy gear use under the Swordfish General Commercial permit; maintain the 35-buoy limit

As described in Chapter 2, under Alternative A3, NMFS would authorize, with the exception of within the Florida Swordfish Management Area, the use of buoy gear to target swordfish under the open access Swordfish General Commercial permit. Under this alternative, NMFS would maintain the 35-buoy limit for the possession or deployment of buoys, consistent with current buoy gear requirements.

Alternative A3 would likely lead to neutral short- and long-term ecological impacts to swordfish, the target species. While Alternative A3 would likely result in increased usage of buoy gear and increased swordfish landings, the stock is healthy and landings are far below the scientifically derived quota. More information about the North Atlantic swordfish stock status and quota is available in the ecological evaluation section for Alternative A2 and in Chapter 3.

Alternative A3 would likely result in neutral to minor adverse short- and long-term ecological impacts to bycatch species, incidentally caught species, protected resources (including sea turtles, sharks listed under the ESA, or marine mammals), and habitat. Alternative A3 would likely result in increased usage of buoy gear specifically in areas outside of the southeastern Florida area where use of the gear is currently concentrated. As detailed in Section 3.4.1, the use of buoy gear is highly concentrated off the east coast of Florida, and especially in the southern half of that coast (greater than 95 percent of buoy gear trips occur off the east coast of Florida). Since Swordfish General Commercial permit holders would not be able to use buoy gear in the Florida Swordfish Management Area, all increased fishing effort would occur in areas where the gear is not currently used or is only deployed sporadically. Although buoy gear is highly selective for target species with low bycatch and incidental catch (Section 3.4.1), with any increase in effort, there is likely to be an increase in associated impacts, including increased bycatch and incidental catch of non-target species. Since buoy gear use is highly concentrated in the southeastern Florida area, there is less data available on non-target species catch outside that area and single year anomalies can lead to varying results. Pelagic logbook data show that from 2020 through 2024, buoy gear was still highly selective in areas outside the east coast of Florida (the west coast of Florida, Massachusetts, New Jersey, North Carolina, Alabama, and Louisiana) (Table 3.5). In that data set in 2021, there was an abnormally high report of blackfin tuna kept and an abnormally high report of blue sharks discarded alive. Removing 2021 data from the data set results in over 70 percent catch of swordfish, followed by 15 percent catch of large coastal sharks (predominately live releases of hammerhead sharks, blacktip sharks, and silky sharks), and 4 percent blackfin tuna.

This alternative could increase the amount of gear deployed at one time, increasing potential interactions associated with more gear in the water. However, in the data from 2020 to 2024, no marine mammal or sea turtle catch was reported in any year, including 2021. Thus, despite the lower volume of data outside the east coast of Florida, there are no indications that non-target catch would result in large impacts. As described above, NMFS does not expect any interactions with protected resources. However, if there are interactions, because buoy gear is a tended gear, NMFS expects any such species could be quickly released with a minimum of harm. See Section 7.4 for more information on impacts to protected resources.

Since buoy gear is not fished in a manner that contacts the sea floor, no impacts to bottom habitats are expected.

Alternative A4: Authorize buoy gear use under the Swordfish General Commercial permit; establish a 5-buoy limit – Preferred Alternative

As described in Chapter 2, preferred Alternative A4 is the same as Alternative A3, but NMFS would lower the limit on the number of buoys that may be possessed on board or deployed for Swordfish General Commercial permit holders to 5 buoys.

Alternative A4 would likely lead to neutral short- and long-term ecological impacts to swordfish, the target species. While Alternative A4 would likely result in increased usage of buoy gear and increased swordfish landings, the stock is healthy and landings are far below the scientifically derived quota. More information about the North Atlantic swordfish stock status and quota is available in the ecological evaluation section for Alternative A2 and in Chapter 3.

Alternative A4 would likely result in neutral to minor adverse short- and long-term ecological impacts to bycatch species, incidentally caught species, protected resources (including sea turtles, sharks listed under the ESA, or marine mammals), and habitat. These impacts are likely to be largely the same as the ecological impacts for Alternative A3 since this alternative is very similar. However, since Alternative A4 would reduce the maximum number of buoys from 35 to 5, this would lower the magnitude of adverse ecological impacts associated with expanding the use of buoy gear into new areas outside southeastern Florida where effort is currently concentrated, compared to Alternatives A3 and A5. Impact to non-target species is proportional to the number of hooks deployed, so a reduction in number of hooks limits ecological impacts to those species. Additionally, as detailed in the ecological impacts discussion under Alternative A3, buoy gear is still highly selective with low bycatch and incidental catch in areas outside where the use is currently concentrated. We do not expect any increase in interactions with protected resources. See Section 7.4 for more information on impacts to protected resources.

Buoy gear is not fished in a manner that contacts the sea floor, thus no impacts to bottom habitats are expected.

Alternative A5: Authorize buoy gear use under the Swordfish Incidental LAP; maintain the 35-buoy limit

As described in Chapter 2, under Alternative A5, NMFS would authorize the use of buoy gear to target swordfish under the Swordfish Incidental LAP.

Alternative A5 would likely lead to neutral short- and long-term ecological impacts to swordfish, the target species. While Alternative A5 would likely result in increased usage of buoy gear and increased swordfish landings, the stock is healthy and landings are far below the scientifically derived quota. More information about the North Atlantic swordfish stock status and quota is available in the ecological evaluation section for Alternative A2 and in Chapter 3.

Alternative A5 would likely result in neutral short- and long-term ecological impacts to bycatch species, incidentally caught species, protected resources (including sea turtles, sharks listed under the ESA, or marine mammals), and habitat. Similar to Alternative A4, this alternative limits the expansion of buoy gear effort in comparison with A3, but the limitation is introduced through the permit type, rather than limiting the number of authorized buoys. Relative to the 619 permits held in 2024 under the Swordfish General Commercial permit category, there were only 66 Swordfish Incidental permit holders. Alternative A5 would place more of a limit on the potential expansion of the use of buoy gear, and therefore have less adverse ecological impacts than Alternatives A3 or A4. Additionally, as detailed in the ecological impacts discussion under Alternative A3, buoy gear is still highly selective with low bycatch and incidental catch.

We do not expect any increase in interactions with protected resources. See Section 7.4 for more information on impacts to protected resources.

Buoy gear is not fished in a manner that contacts the sea floor, thus no impacts to bottom habitats are expected.

Alternative A6: Authorize the retention of BAYS tunas caught on buoy gear dependent on permit type – Preferred Alternative

As described in Chapter 2, under Alternative A6, NMFS would allow BAYS tunas to be retained with buoy gear under additional permits.

Alternative A6 would likely lead to neutral short- and long-term ecological impacts to BAYS tunas, the target species under this alternative. While Alternative A6 would likely result in increased usage of buoy gear and increased BAYS tunas landings, all BAYS tunas stocks are not overfished or experiencing overfishing (Section 3.3). Furthermore, BAYS tunas are not often caught on buoy gear (Table 3.5 in Section 3.4.1) and would likely only be caught and retained opportunistically. Thus, only a modest increase in BAYS tunas landings would be expected related to the overall increase in fishing effort, but not significant in comparison with more efficient gears that target those species (e.g., pelagic longline).

Alternative A6 would likely result in neutral short- and long-term ecological impacts to bycatch species, incidentally caught species, protected resources (including sea turtles, sharks listed under the ESA, or marine mammals), and habitat. As noted above in the ecological impacts discussion for this alternative, BAYS tunas are not often caught on buoy gear, and it is not likely that there would be large increases in buoy gear effort. Instead, it is more likely that BAYS

would be retained as they are opportunistically caught while targeting other species, specifically swordfish. We do not expect any increase in interactions with protected resources. See Section 7.4 for more information on impacts to protected resources.

As noted above in the ecological impacts discussion for this alternative, buoy gear is not fished in a manner that contacts the sea floor, thus no impacts to bottom habitats are expected.

Alternative A7: Authorize the retention of allowable shark species caught with buoy gear dependent on permit type – Preferred Alternative

As described in Chapter 2, under Alternative A7, the retention of some shark species caught with buoy gear would be authorized for persons holding a Shark Directed LAP, a Shark Incidental LAP, a Smoothhound Shark permit, or an HMS CCSB permit (valid in the U.S. Caribbean only), subject to the retention limits and authorized species under those permits.

Alternative A7 would likely lead to neutral short- and long-term ecological impacts to authorized shark species, the target species under this alternative. While Alternative A7 would likely result in increased usage of buoy gear and increased landings of authorized shark species, current shark quotas have been underutilized for several years. Furthermore, authorized shark species are not often caught on buoy gear (Table 3.5 in Section 3.4.1) and would likely only be caught and retained opportunistically. Thus, only modest increases in shark landings would be expected, with no threat of overharvesting quotas.

Alternative A7 would likely result in neutral short- and long-term ecological impacts to bycatch species, incidentally caught species, protected resources (including sea turtles, sharks listed under the ESA, or marine mammals), and habitat. As noted above in the ecological impacts discussion for this alternative, authorized shark species are not often caught on buoy gear, and it is not likely that there would be large increases in buoy gear effort. Instead, it is more likely that sharks would be retained as they are opportunistically caught while targeting other species, specifically swordfish. We do not expect any increase in interactions with protected resources. See Section 7.4 for more information on impacts to protected resources. Buoy gear is not fished in a manner that contacts the sea floor, thus no impacts to bottom habitats are expected.

4.2.1.2 Social and Economic Impacts

Alternative A1: Maintain the current buoy gear regulations – No Action

Under Alternative A1, the No Action alternative, NMFS would maintain the current buoy gear regulations. Since there would be no change to current regulations, fishing practices and costs would not change, and social and economic impacts to fishermen, seafood dealers, and bait and tackle suppliers would be neutral in the short and long term.

Alternative A2: Authorize the use of power assistance for buoy gear (e.g., hydraulic, electric) - Preferred Alternative

As described in Chapter 2, Alternative A2, a preferred alternative, would allow the use of power assistance for releasing and retrieving buoy gear. Alternative A2 would likely result in minor

beneficial short- and long-term social and economic impacts to fishermen who opt to use power assistance. Power assistance would likely be provided by an electric reel at a cost of approximately \$8,000 or a hydraulic rig at a cost of approximately \$2,000. While there is an upfront cost to buy the equipment, the ability to use power assistance, especially for deep-set gear, would likely increase buoy gear fishing efficiency and make buoy gear fishing operations less difficult and strenuous. Increased fishing efficiency would be achieved through quicker retrieval of gear, allowing for hooked fish to be removed and the gear to be re-deployed more quickly. These changes could increase the amount of time or the number of hooks in the water, resulting in increased catch, or reduced trip times, if the retention limit or intended catch is reached more quickly. A reduction in trip time could save on fuel and ancillary supply costs and reduce the amount of time spent fishing, allowing for time to dedicate to other endeavors. Alternatively, a reduction in trip time could allow participants to explore other fishing areas, thus increasing opportunities. If this activity is less strenuous, the chance of injuries that can impact the ability to fish and carry out other activities could be reduced, which in turn, could allow fishermen to engage in more or longer fishing trips or participate in other activities. Any increase in effort could lead to additional landings and revenue for fishermen. Increases in effort could also lead to increased costs (*e.g.*, fuel, bait), but such decisions would be up to individual fishermen and NMFS anticipates that these costs would be offset by any additional landings.

Alternative A2 would likely result in neutral short- and long-term social and economic impacts to supporting businesses such as seafood dealers and bait and tackle suppliers. Any increase in landings or additional equipment sales would be relatively small, thus, impacts to supporting businesses would be neutral.

Alternative A3: Authorize buoy gear use under the Swordfish General Commercial permit; maintain the 35-buoy limit

As described in Chapter 2, under Alternative A3, NMFS would authorize, outside the Florida Swordfish Management Area, the use of buoy gear to target swordfish under the open access Swordfish General Commercial permit, and would maintain the 35-buoy limit for the possession or deployment of buoys, consistent with current buoy gear requirements.

Alternative A3 would likely result in minor beneficial short- and long-term social and economic impacts to fishermen. Allowing the use of buoy gear by Swordfish General Commercial permit holders expands fishing opportunities and provides the option of a fishing technique that increases the number of hooks that can be deployed at one time. Most Swordfish General Commercial permit holders currently use rod and reel, which limits the number of lines that can be deployed at one time to avoid tangling. For many vessels, a maximum of four lines is typical. Since buoy gear is free-floating, more lines could be deployed at once, up to 35 under Alternative A3. More gear in the water increases the opportunity for catch, leading to potential increases in landings, shorter trips, or both. For these reasons, Swordfish General Commercial permit holders using buoy gear could have lower trip costs and higher revenue, leading to beneficial direct social and economic impacts. Despite the increased opportunities for additional fishermen to commercially retain swordfish, the total number of swordfish caught and landed by permit holders using this gear would likely still be minor in the context of total U.S. Atlantic landings.

Alternative A3 would likely result in neutral short- and long-term social and economic impacts to supporting businesses such as seafood dealers and bait and tackle suppliers. Any increase in landings or additional equipment sales would be relatively small, thus, impacts to supporting businesses would be neutral. Additionally, Alternative A3 would not likely negatively impact the value of the Swordfish Handgear LAP because that permit could be used in the productive South Florida fishing grounds that coincide with the Florida Swordfish Management Area where the swordfish handgear fishery is chiefly located. Thus, the value of the Swordfish Handgear LAP would be maintained, as it would provide access to productive swordfish fishing grounds that would be unavailable to Swordfish General Commercial permit holders under current regulations. Furthermore, authorizing buoy gear under the Swordfish General Commercial permit under Alternative A3 could increase fishing opportunities outside of the southeastern Florida area where use of the gear is currently concentrated, avoiding increased gear conflict in that area. The Swordfish General Commercial permit has a zero swordfish retention limit in the Swordfish Management Area (which includes southeastern Florida), so any increased buoy gear usage under this permit would not result in increased effort in the southeastern Florida area. For these reasons, Alternative A3 would likely have neutral social or economic impacts to supporting businesses.

Alternative A4: Authorize buoy gear use under the Swordfish General Commercial permit; establish a 5-buoy limit – Preferred Alternative

Alternative A4 is the same as Alternative A3 with the exception that under this preferred alternative, permit holders could only deploy up to 5 buoys.

As with Alternative A3, preferred Alternative A4 would likely result in minor beneficial short- and long-term social and economic impacts to fishermen. These impacts are likely to be largely the same as those for Alternative A3, though somewhat lessened due to the lower buoy limit of 5 buoys, as compared to 35 buoys under current gear regulations (and Alternative A3).

Additionally, similar to Alternative A3, Alternative A4 would likely result in neutral short- and long-term social and economic impacts to supporting businesses such as seafood dealers and bait and tackle suppliers, as any increase in landings or additional equipment sales would be relatively small. Unlike Alternative A3, preferred Alternative A4 would limit the maximum number of buoys that could be deployed by Swordfish General Commercial permit holders from 35 to 5, while the Swordfish Handgear LAP would maintain the higher 35-buoy limit. This limitation on the number of buoys for Swordfish General Commercial permits might help to maintain the desirability and value of the Swordfish Handgear LAP.

Alternative A5: Authorize buoy gear use under the Swordfish Incidental LAP; maintain the 35-buoy limit

As described in Chapter 2, under Alternative A5, NMFS would authorize the use of buoy gear to target swordfish under the Swordfish Incidental LAP.

Alternative A5 would likely result in minor beneficial short- and long-term social and economic impacts to fishermen. Similar to Alternatives A3 and A4, authorizing buoy gear for use under the Swordfish Incidental LAP would expand fishing opportunities. The beneficial direct and social economic impacts are likely to be largely the same as those under Alternatives A3 and A4, due to the potential for increased numbers of hooks that can be deployed at one time, leading to increased catch, increased landings, increased revenue, and shorter trips. In contrast to Alternatives A3 and A4, these impacts may be somewhat lessened due to the lower number of permit holders that could potentially adopt the use of this gear. In 2024, relative to the 619 permits held under the Swordfish General Commercial permit category, there were only 66 Swordfish Incidental LAP holders.

Alternative A5 would likely result in neutral short- and long-term social and economic impacts to supporting businesses such as seafood dealers and bait and tackle suppliers. Any increase in landings or additional equipment sales would be relatively small, thus, impacts to supporting businesses would be neutral. While Swordfish Incidental LAP holders would be authorized to target swordfish in all U.S. Atlantic waters, including the Florida Swordfish Management Area, Alternative A5 would not be expected to negatively impact the value of Swordfish Handgear LAP because the Swordfish Incidental permit is also a LAP, and compared to the Swordfish General Commercial category permit, has significantly fewer permit holders. As discussed above, Alternative A5 would not be expected to result in substantially increased gear conflict in the narrow southeastern Florida area. For these reasons, Alternative A5 is unlikely to have any social or economic impacts to supporting businesses.

Alternative A6: Authorize the retention of BAYS tunas caught on buoy gear dependent on permit type – Preferred Alternative

As described in Chapter 2, under Alternative A6, Atlantic Tunas General category and Atlantic Tunas Longline category LAP permit holders would be able to target and retain BAYS tunas using buoy gear, consistent with permit retention limits in all areas outside the Florida Swordfish Management Area. BAYS tunas caught on buoy gear could not be retained in the Florida Swordfish Management Area.

Alternative A6 would likely result in minor beneficial short- and long-term social and economic impacts to fishermen. Authorizing additional species to be retained expands fishing opportunities and may lead to increased revenue from landing and sales of valuable species. However, beneficial economic impacts would be somewhat constrained due to two factors. First, retention of BAYS tunas caught on buoy gear would be limited to areas outside the Florida Swordfish Management Area, where use of the gear is less common. Second, BAYS tunas are not often caught on buoy gear, thus, BAYS tunas retained under Alternative A6 would likely have been caught incidentally and the number would be modest. For these reasons, authorizing the retention of BAYS tunas caught on buoy gear is likely to have minor beneficial economic impacts.

Alternative A6 would likely result in neutral short- and long-term social and economic impacts to supporting businesses such as seafood dealers and bait and tackle suppliers. Any increase in landings or additional equipment sales would be relatively small, thus, impacts to supporting businesses would be neutral.

Alternative A7: Authorize the retention of allowable shark species caught with buoy gear dependent on permit type – Preferred Alternative

As described in Chapter 2, under Alternative A7, the retention of some shark species caught with buoy gear would be authorized for persons holding a Shark Directed LAP, Shark Incidental LAP, a Smoothhound Shark permit, or an HMS CCSB permit (valid in the U.S. Caribbean only), subject to the retention limits and authorized species under those permits.

Alternative A7 would likely result in minor beneficial short- and long-term social and economic impacts to fishermen. Authorizing additional species to be retained expands fishing opportunities and may lead to increased revenue from landing and sales of valuable species. However, beneficial economic impacts are somewhat constrained since sharks are not often caught on buoy gear, thus, sharks retained under Alternative A7 would likely have been caught incidentally and the number would be modest. For these reasons, authorizing the retention of some shark species caught on buoy gear is likely to have minor beneficial economic impacts.

Alternative A7 would likely result in neutral short- and long-term social and economic impacts to supporting businesses such as seafood dealers and bait and tackle suppliers. Any increase in landings or additional equipment sales would be relatively small, thus, impacts to supporting businesses would be neutral.

4.2.2 Impacts of Alternatives for Speargun Fishing Gear Management Measures

NMFS is analyzing three alternatives for revisions to speargun fishing gear management measures. Chapter 2 fully describes each alternative; those descriptions are summarized here.

4.2.2.1 Ecological Evaluation

Alternative B1: Maintain current speargun fishing gear regulations – No Action

Under Alternative B1, the No Action alternative, NMFS would maintain the current regulations for speargun fishing gear use. Speargun fishing gear use would only be authorized in recreational and Charter/Headboat BAYS tuna fisheries. The use of speargun fishing gear would not be authorized for targeting other HMS or for use in commercial HMS fisheries.

Since there would be no change to current regulations, direct ecological impacts to target species, specifically BAYS tunas, would be neutral in the short and long term. Catch rates and fishing effort for BAYS tunas using speargun fishing gear would not change, thus, no new ecological impacts to target species are expected. Similarly, ecological impacts to incidentally caught species and protected resources would be neutral in the short and long term. Since fishing effort would not change, any associated impacts to those species would also not change. Because this alternative would not meet the objective of this action to increase fishing opportunities and the ability of HMS fisheries to achieve optimum yield, NMFS does not prefer this alternative at this time.

Alternative B2: Authorize the retention of BAYS tunas caught with speargun fishing gear for some commercial tuna permit holders, consistent with permit retention and size limits – Preferred Alternative

As described in Chapter 2, under Alternative B2, the preferred alternative, NMFS would authorize the use of speargun fishing gear to retain BAYS tunas with some commercial permits. Specifically, the authorized commercial permits would be the Atlantic Tunas General category permit, HMS CCSB permit (valid in the U.S. Caribbean only), and HMS Charter/Headboat permit (with a commercial endorsement and on non-for-hire trips only). All other speargun fishing gear regulations would remain the same.

Short- and long-term ecological impacts to BAYS tunas, the target species, would be neutral under Alternative B2. While Alternative B2 would allow the commercial harvest of BAYS tunas with speargun fishing gear, NMFS believes this would result in minimal increase of landings because NMFS does not anticipate a large number of fishermen choosing to use speargun fishing gear commercially and because NMFS believes the likelihood of catching a legal-size BAYS tunas for commercial purposes is low. As described in Table 3.1, the stock statuses for species within the BAYS tuna management group all indicate that no overfishing is occurring.

Alternative B2 would likely result in neutral short- and long-term ecological impacts to incidentally caught species and protected resources. The use of speargun fishing gear is a very selective gear type. Persons fishing for Atlantic BAYS tunas using speargun fishing gear, as specified in 50 CFR 635.19, must be physically in the water when the speargun fishing gear is fired or discharged. Thus, the person would be able to identify the correct species before discharging the speargun fishing gear.

Speargun fishing gear does not interact with the sea floor, thus no impacts to habitat are expected.

Because of the stock status for BAYS tunas and because a minimal increase in landings is unlikely to have any ecological impacts to those species, NMFS prefers this alternative at this time.

Alternative B3: Authorize the retention of Atlantic bluefin tuna caught with speargun fishing gear for recreational tuna permit holders, consistent with permit retention and size limits

As described in Chapter 2, under Alternative B3, NMFS would authorize the use of speargun fishing gear to retain Atlantic bluefin tuna recreationally. All other speargun fishing gear regulations remain the same.

Short- and long-term ecological impacts to bluefin tuna, the target species, would be neutral under Alternative B3. While Alternative B3 would allow the recreational harvest of Atlantic bluefin tuna with speargun fishing gear, NMFS believes this would result in minimal increase of landings, because NMFS does not anticipate that a large number of anglers would choose to use speargun fishing gear and because NMFS believes the likelihood of catching a legal-size Atlantic

bluefin tuna for recreational purposes is low. Thus, a minimal increase in landings and fishing mortality are unlikely to have any ecological impacts to the target species. When speargun fishing gear became an authorized gear in 2006, it was limited to BAYS tunas due to stock status concerns for other HMS including Atlantic bluefin tuna. At that time, Atlantic bluefin tuna were overfished with overfishing occurring. Currently, the stock status has changed, and overfishing is no longer occurring (although the “overfished” stock status is “unknown”).

Alternative B3 would likely result in neutral short- and long-term ecological impacts to incidentally caught species and protected resources. The use of speargun fishing gear is a very selective gear type. Persons fishing with speargun fishing gear, as specified in 50 CFR 635.19, must be physically in the water when the speargun fishing gear is fired or discharged. Thus, the person should be able to identify the correct species before discharging the speargun fishing gear.

Speargun fishing gear do not interact with the sea floor, thus no impacts to habitat are expected. Because the “overfished” stock status for Atlantic bluefin tunas has not changed (*i.e.*, it remains “unknown”), NMFS does not prefer this alternative at this time.

4.2.2.2 Social and Economic Impacts

Alternative B1: Maintain current speargun fishing gear regulations – No Action

As described in Chapter 2, under Alternative B1, the No Action alternative, NMFS would maintain the current regulations for speargun fishing gear use.

Since there would be no change to current regulations, social and economic impacts to fishermen would be neutral in the short and long term. Fishing practices and costs would not change; thus, no new economic impacts are expected. Similarly, social and economic impacts to supporting businesses such as seafood dealers and bait and tackle suppliers would be neutral in the short and long term. Since fishing practices and costs would not change, any associated impacts to supporting businesses would also not change.

Alternative B2: Authorize the retention of BAYS tunas caught with speargun fishing gear for some commercial tuna permit holders, consistent with permit retention and size limits – Preferred Alternative

As described in Chapter 2, under Alternative B2, the preferred alternative, NMFS would authorize the use of speargun fishing gear to retain BAYS tunas with some commercial permits.

Alternative B2 would likely result in neutral to minor beneficial short- and long-term social and economic impacts to fishermen. While Alternative B2 would allow the commercial harvest of BAYS tunas with speargun fishing gear, NMFS believes this would result in minimal increase of landings, because NMFS does not anticipate that a large number of fishermen would choose to use speargun fishing gear commercially and because NMFS believes the likelihood of catching a legal-size BAYS tunas for commercial purpose is low. In addition, speargun fishing gear is a very selective gear type and not commonly used in the fishery.

Comments received during Advisory Panel meetings indicate that a number of stakeholders are concerned about the safety of speargun fishing gear users who must use the gear in the water. The primary concerns include shark bites, particularly given the continuing increase in shark depredation reports, and injuries caused by contact with fishing vessels that may not be aware there is a person in the water. However, NMFS has not heard similar safety concerns from speargun fishing gear participants themselves; rather they continue to ask for an expansion of their fishery.

Due to these factors, Alternative B2 would likely result in neutral to minor beneficial short- and long-term social and economic impacts to fishermen.

Alternative B2 would likely result in neutral short- and long-term social and economic impacts to supporting businesses such as seafood dealers and bait and tackle suppliers. Any increase in BAYS tuna landings or additional equipment sales would be relatively small, thus, impacts to supporting businesses would be neutral.

Alternative B3: Authorize the retention of Atlantic bluefin tuna caught with speargun fishing gear for recreational tuna permit holders, consistent with permit retention and size limits

As described in Chapter 2, under Alternative B3, NMFS would authorize the use of speargun fishing gear to retain Atlantic bluefin tuna recreationally.

Alternative B3 would likely result in neutral short- and long-term social and economic impacts to fishermen. While Alternative B3 would allow the recreational harvest of bluefin tuna with speargun fishing gear, NMFS believes this would result in minimal increase of landings, because NMFS does not anticipate that a large number of fishermen would choose to use speargun fishing gear recreationally and because NMFS believes the likelihood of catching a legal-size bluefin tuna for recreational purposes is low. In addition, speargun fishing gear is a very selective gear type and not commonly used in the fishery.

NMFS has heard concerns from other stakeholders who fear for the safety of any angler in the water near a fleet of recreational vessels. These stakeholders have also expressed concerns about having new entrants (*i.e.*, those using speargun fishing gear for the first time) into the bluefin tuna fishery. NMFS has not heard similar safety concerns from speargun fishing gear participants themselves; rather they continue to ask for an expansion of their fishery.

Due to these factors, Alternative B3 would likely result in neutral short- and long-term social and economic impacts to fishermen.

Alternative B3 would likely result in neutral short- and long-term social and economic impacts to supporting businesses such as seafood dealers and bait and tackle suppliers. Any increase in Atlantic bluefin tuna fishing effort and opportunities or additional equipment sales would be relatively small, thus, impacts to supporting businesses would be neutral.

4.2.3 Impacts of Alternatives for Bait Collection Gear Management Measures

NMFS is analyzing two alternatives for revisions to bait collection gear management measures. Chapter 2 fully describes each alternative; those descriptions are summarized here.

4.2.3.1 Ecological Evaluation

Alternative C1: Maintain current regulations that do not allow possession and use of small nets and other gear commonly used for bait collection on board HMS fishing vessels – No action

Under Alternative C1, NMFS would maintain current regulations for primary and secondary gear authorizations. Under current regulations, the possession and use of small nets and other gear commonly used for bait collection (*e.g.*, cast nets and small dipnets) is not allowed on HMS fishing vessels. Under this alternative, no changes in fishing effort targeting either HMS or bait species would be expected. Therefore, Alternative C1 would likely lead to neutral short- and long-term ecological impacts.

Alternative C2: Allow possession and use of small nets and other gear commonly used for bait collection on board HMS fishing vessels – Preferred Alternative

As described in Chapter 2, under Alternative C2, the preferred alternative, the possession and use of small nets and other gear commonly used for bait collection (*e.g.*, cast nets and small dipnets) would be allowed on board HMS fishing vessels, provided that the gear is too small and/or too weak to capture HMS.

Alternative C2 would likely lead to neutral short- and long-term ecological impacts, since the practice of bait collection is already a common practice across many fisheries, and changes in fishing effort targeting bait species is not expected to increase. Additionally, there is unlikely to be any impact to HMS since the allowance of bait collection gear on HMS vessels would be limited to gear that is incapable of capturing or fishing for HMS. Bait collection gear would not be authorized to fish for or retain HMS, so impacts to habitat are not analyzed.

4.2.3.2 Social and Economic Impacts

Alternative C1: Maintain current regulations that do not allow possession and use of small nets and other gear commonly used for bait collection on board HMS fishing vessels – No action

Under Alternative C1, NMFS would maintain current regulations for primary and secondary gear authorizations. Under current regulations, the possession and use of small nets and other gear commonly used for bait collection (*e.g.*, cast nets and small dipnets) is not allowed on board HMS fishing vessels. Under this alternative, no changes to enforcement or effort by fishermen to comply with HMS regulations would be required. However, many HMS fishermen may have bait collection gears on board their vessels, and under this alternative, a mismatch would be maintained between current regulations and common practices in some HMS fisheries. Continuing the practice of maintaining bait collection gear on board could result in inadvertent violations of authorized gear regulations. Additionally, this alternative would not support the

flexibility of fishermen to begin targeting bait species, and could result in missed opportunities for reducing bait costs. Under Alternative C1, minor adverse short- and long-term social and economic impacts would be expected as a result of inadvertent violations and missed opportunity for targeting bait species.

Alternative C2: Allow possession and use of small nets and other gear commonly used for bait collection on board HMS fishing vessels – Preferred Alternative

As described in Chapter 2, under Alternative C2, the preferred alternative, NMFS would modify the regulations to allow possession and use of small nets and other gear commonly used for bait collection (e.g., cast nets and small dipnets) on board HMS permitted vessels, provided that the gear is too small and/or too weak to capture HMS. Allowing this gear could reduce uncertainty related to compliance with current regulations and mitigate issues where fishermen could be inadvertently in violation of gear regulations. Additionally, it would increase flexibility for additional HMS permit holders to target bait species and save on bait costs. This alternative would not change the specific baits that are allowed or prohibited for use with certain gears; rather this alternative simply provides an option for fishermen to carry and use bait collection gear on board HMS fishing vessels. Overall, Alternative C2 would be expected to lead to minor beneficial short- and long-term social and economic benefits.

4.2.4 Comparison of National Environmental Policy Act Alternatives

Table 4.1 provides a qualitative comparison of the impacts associated with the various alternatives considered in this rulemaking. This table summarizes the impacts that were discussed in detail in Sections 4.1–4.4.2.

Table 4.1. Comparison of NEPA alternatives considered

Alternative	Ecological	Social and Economic
Alternative A1	Neutral	Neutral
<i>Alternative A2 (Preferred Alternative)</i>	Neutral	Neutral to Minor Beneficial
Alternative A3	Neutral to Minor Adverse	Neutral to Minor Beneficial
<i>Alternative A4 (Preferred Alternative)</i>	Neutral to Minor Adverse	Neutral to Minor Beneficial
Alternative A5	Neutral	Neutral to Minor Beneficial
<i>Alternative A6 (Preferred Alternative)</i>	Neutral	Neutral to Minor Beneficial
<i>Alternative A7 (Preferred Alternative)</i>	Neutral	Neutral to Minor Beneficial
Alternative B1	Neutral	Neutral
<i>Alternative B2 (Preferred Alternative)</i>	Neutral	Neutral to Minor Beneficial

Alternative B3	Neutral	Neutral
Alternative C1	Neutral	Minor Adverse
<i>Alternative C2 (Preferred Alternative)</i>	Neutral	Minor Beneficial

4.3 THE REASONABLY FORESEEABLE EFFECTS OF THE PROPOSED ACTION

The determination of “significance” is central to establishing what level of NEPA review is required for a proposed activity or decision. NEPA requires agencies to prepare an environmental impact statement for any proposed activity or decision “significantly affecting the quality of the human environment.” For the purpose of making a determination regarding whether the proposed action significantly affects the quality of the human environment, NMFS considers only adverse effects to be significant. In other words, if a proposed action had only beneficial effects, NMFS would determine that the proposed action does not significantly affect the quality of the human environment, and would not, therefore, produce an environmental impact statement. NMFS would, however, consider beneficial effects when conducting the appropriate level of environmental review.

When considering whether the reasonably foreseeable effects of the proposed activity or decision are significant, NMFS analyzes the potentially affected environment and degree of the effects of the activity or decision. In considering the potentially affected environment, NMFS considers, as appropriate to the specific action, the affected geographic area, and the national, regional, and local contexts. NMFS also identifies the resources in the geographic area that they reasonably foresee being adversely impacted by the proposed activity or decision and considers the following impacts: ecological, aesthetic, historic, cultural, economic, social, and public health and safety. The goal of this section is to describe those impacts and reasonably foreseeable future actions on stakeholders and the environment, with regard to the management measures presented in this document.

Overall, the preferred alternatives in this EA would have neutral to minor adverse ecological impacts. While Alternative A2 could lead to increased bycatch via increased fishing effort, the level of increase is not expected to be substantial. Additionally, increased rates of post release survivability for any caught bycatch species would be expected to be higher, as power assistance would allow for faster release of those species. Under Alternative A4, neutral impacts to swordfish, the target species, would be expected, as any increases in landings would still be expected to be well below the allowable quota. While Alternative A4 would be expected to increase instances of bycatch, the level of increase would be limited, based on the limitation on the number of authorized buoys. Under Alternative A6, there would be neutral impacts to BAYS tunas, the target species, as any increase in landings would be expected to be modest. Additionally, neutral impacts would be expected for bycatch, incidentally caught species, protected resources, and habitat. Alternative A7 would both be expected to have neutral impacts to target species, BAYS tunas and sharks, respectively, and non-target, bycatch, and incidentally caught species. Neutral impacts under these alternatives would be expected to result in only modest increases in catch rate for both target and non-target species. The increased landings of BAYS tunas under Alternative B2 are expected to be minimal, due to low speargun gear fishing

effort and the low likelihood of catching a fish that is an appropriate size for commercial purposes. Additionally, this is a highly selective gear type and increases to bycatch or incidentally caught species would not be likely. Ecological impacts under Alternative C2 would be neutral, as the practice of bait collection is already common on HMS fishing vessels, and the new authorizations would limit net and gear size to those that cannot capture HMS.

Overall, the preferred alternatives in this action would have neutral to minor beneficial social and economic impacts. Alternative A2 would support less strenuous fishing experiences, helping to avoid injury that could be associated with hand deployment and retrieval of buoy gear. Power assistance could increase fishing efficiency and lead to increased landings and increased sales for fishermen opting to use power assistance. These benefits would likely outweigh the initial cost of purchasing an electric reel or hydraulic rig. Indirect beneficial impacts would be expected for supporting businesses, but these impacts would be expected to be relatively small, in comparison with overall fishing expenditures. Under Alternative A4, Swordfish General Commercial permit holders may experience increased landings, more efficient fishing trips, and higher revenue per trip as a result of that efficiency. Additionally, under this alternative, indirect impacts to supporting businesses are likely to be neutral, as the changes in landings and equipment sales would be small, relative to overall fishing expenditures. Authorizing additional species for retention under Alternative A6 would expand fishing opportunities and may lead to increased revenue. However, catching BAYS on buoy gear is not common, and any increases in BAYS caught on buoy gear would be modest. Additionally, under Alternative A6, indirect impacts to supporting businesses are likely to be neutral, as the changes in landings and equipment sales would be small, relative to overall fishing expenditures. Alternative A7 would both be expected to support minor beneficial impacts to fishermen as a result of increased landings and sales of valuable species. Under Alternative B2, commercial harvests of BAYS tunas caught on speargun fishing gear is likely to result in minimal landings increases. This could be due to the low number of fishermen expected to choose to use speargun fishing gear commercially, and the low likelihood of catching a legal-size BAYS tuna. Additionally, although some concerns about the safety of speargun fishing gear users were raised, these concerns were not heard from the speargun fishing gear participants themselves. Alternative C2 would allow HMS permit holders to target bait species, saving on supply costs. Additionally, this alternative would mitigate negative social impacts associated with inadvertent violations of current regulations.

The status quo or no-action alternatives would have neutral ecological and neutral to minor adverse social and economic impacts. These alternatives would maintain current regulations. Regarding Alternatives A1 and B1, maintaining current regulations would result in no change in fishing practices, impacts to target or non-target species, and no impacts on fishing costs or impacts to supporting businesses. Maintaining regulations that do not allow bait collection gear on HMS fishing vessels under Alternative C1 would not be expected to impact species targeted for bait collection, as this is already a common practice on many types of fishing vessels including HMS vessels. However, maintaining these regulations would maintain a mismatch in current practice and the regulations, resulting in inadvertent violations.

Non-preferred alternatives A3, A5, and B3 would have neutral to minor adverse ecological impacts. Alternatives A3 and A5 would likely have neutral impacts on swordfish, which is a healthy stock and has an underutilized quota, but may lead to increased levels of bycatch as a

result of expanded use of buoy gear. These alternatives would allow a higher maximum number of buoys allowed (35) in comparison with the preferred alternative (5). Alternative B3 would have neutral impacts both on the target species (bluefin tuna) and bycatch or incidentally caught species.

The preferred alternatives considered in this action are likely to have neutral effects on protected resources, including sea turtles, sharks listed under the ESA, or marine mammals protected by the MMPA. The purpose of the preferred alternatives is to provide increased flexibility and remove inefficiencies in fisheries targeting HMS, while still achieving fishery conservation and management goals, thus increasing fishing opportunities and the ability of HMS fisheries to achieve optimum yield. While preferred alternatives A2, A4, A6, and A7 could increase fishing gear effort using buoy gear, this gear type is a tended gear with fishermen watching for indications of a hooked fish and then quickly retrieving to maintain fish quality. Selectivity of this buoy gear is high with low bycatch and incidental catch. Under preferred Alternative B2, no impacts to habitat are expected, as speargun fishing gear does not interact with the sea floor. Additionally, the bait collection gear allowed to be possessed and used on board HMS fishing vessels under preferred Alternative C2 would not be authorized to fish for or retain HMS and would not impact habitat or protected resources. We do not expect an increase in interactions with protected resources such as those listed above. See Section 7.4 for more information on impacts to protected resources.

Non-preferred alternatives would have neutral to minor beneficial social and economic impacts. Increased fishing opportunities considered under Alternatives A3 and A5 would all expand fishing opportunities and provide the chance for fishermen to increase landings. These alternatives would also have neutral impacts to supporting businesses such as seafood dealers and bait and tackle suppliers, as increases in landings would be small relative in the context of total landings. Under Alternative B3, the potential for increased fishing opportunities for the recreational harvest of bluefin tuna with speargun fishing gear is likely to result in minimal increases in landings. This is due to the low likelihood of catching a legal-size bluefin tuna for recreational purposes and low prevalence of the use of speargun fishing gear.

None of the alternatives considered would have any aesthetic, historic, or cultural impacts.

After considering these impacts and reasonably foreseeable effects, NMFS has determined, pending public comment, that the action does not have a reasonably foreseeable significant effect on the quality of the human environment and therefore an EA is the appropriate level of environmental review for this action.

4.4 LIST OF AGENCIES AND PERSONS CONSULTED

This draft document was developed with input from many people including NMFS staff, NMFS contractors, the public, constituent groups, and the HMS Advisory Panel. More information including a list of the specific NMFS staff and contractors responsible for drafting this document is included in Chapter 8.

4.5 DRAFT CERTIFICATION OF PAGE LIMIT

NMFS has considered the factors mandated by NEPA and, pending public comment, this draft EA represents NMFS' good-faith effort to prioritize documentation of the most important considerations required by the statute within the congressionally mandated page limits. This prioritization reflects NMFS' expert judgment and any considerations addressed briefly or left unaddressed were, in NMFS' judgment, comparatively not of a substantive nature that meaningfully informed the consideration of environmental effects and the resulting decision on how to proceed.

4.6 DRAFT CERTIFICATION OF DEADLINE

This draft EA represents NMFS' good-faith effort to fulfill NEPA's requirements within the congressionally mandated timeline. Once this EA is finalized, this effort will be substantially complete. At that time, NMFS will have thoroughly considered the factors mandated by NEPA and in NMFS' judgment, the analysis contained in the, at that time, final EA will be adequate to inform and reasonably explain NMFS' decision regarding this proposed activity.

5 Regulatory Impact Review

NMFS conducts a Regulatory Impact Review for all regulatory actions that are of public interest in order to comply with E.O. 12866. The Regulatory Impact Review provides, for each alternative, an analysis of the economic benefits and costs to the applicable fishery(ies) and the nation as a whole. The information contained in Chapter 5, taken together with the data and analyses incorporated by reference, comprise the complete Regulatory Impact Review for this proposed action.

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 the Office of Management and Budget to review proposed regulations that are considered to be “significant.” A significant regulatory action under E.O. 12866 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, the environment, public health or safety, or State, local, or tribal governments of communities;
- Create a 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.

5.1 DESCRIPTION OF MANAGEMENT OBJECTIVES

As described in Chapter 1 of this document, NMFS is considering changes to several gear regulations for the purpose of providing increased flexibility and removing inefficiencies in fisheries targeting HMS, while still achieving fishery conservation and management goals, thus increasing fishing opportunities and the ability of HMS fisheries to achieve optimum yield.

5.2 DESCRIPTION OF FISHERY

As described in Chapter 3 of this document, NMFS is considering changes to the buoy gear fishery, the speargun fishing gear fishery, and HMS fisheries in general that may use bait collection gear. Please see Chapter 3 for more information on these fisheries.

5.3 STATEMENT OF PROBLEM

As described in Chapter 1, this action is needed because over the years, HMS fishing gear and techniques have evolved, and some management measures may need to be updated to better achieve the fishery conservation and management goals of the HMS FMP and its amendments.

5.4 DESCRIPTION OF EACH ALTERNATIVE

As described in Chapter 2, NMFS developed various alternatives to consider regarding revisions to HMS fishing gear regulations, specifically buoy gear, speargun fishing gear, and bait collection gear. While the alternatives are briefly described below, more information on the specifics regarding what each alternative entails can be found in Chapter 2.

5.5 ECONOMIC ANALYSIS OF EXPECTED EFFECTS OF EACH ALTERNATIVE RELATIVE TO THE BASELINE

Table 5.1 summarizes the net economic benefits and costs of each of the alternatives analyzed in this EA. Additional details and more complete analyses are provided in Chapter 4.

Table 5.1 Net economic benefits and costs of alternatives

Alternative	Economic Benefits	Economic Costs
Alternative A1: Maintain the current buoy gear regulations – No Action	This alternative would have neutral economic benefits for HMS fishery participants, as fishing practices and costs would not change. There may also be neutral economic impacts on supporting businesses.	This alternative would have neutral economic costs as fishing practices and expenses would not change.
<i>Alternative A2: Authorize the use of power assistance for buoy gear (e.g., hydraulic, electric) - Preferred Alternative</i>	This alternative may have minor economic benefits by allowing for increased fishing efficiency, potential reductions in trip costs, and increased revenue associated with potential increases in landings. This alternative could result in small economic benefits for supporting businesses if it results in increases in landings.	If fishermen opt to use power assistance under this alternative, a power assist system could cost approximately \$8,000. If efficiency increases sufficiently, fishermen may decide to purchase additional gear or go on more or longer trips, resulting in increased fuel costs.

Alternative A3: Authorize buoy gear use under the Swordfish General Commercial permit; maintain the 35-buoy limit	This alternative may have minor economic benefits for fishermen and supporting businesses if switching to a new gear results in an increase in landings and reduced trip costs. This alternative may have neutral economic benefits for supporting businesses, as increases in landings would likely be relatively small.	This alternative may have neutral economic costs overall. In the short term, this alternative may have neutral to minor economic costs if fishermen decide to purchase additional gear. Potential increases in effort could also lead to increased costs (e.g., fuel, bait) that are offset by any additional landings. There may also be costs associated with unexpected increases in effort in this open access fishery, such as gear entanglement and lost gear if new entrants are not familiar with deployment of buoy gear. In the long term, potential increases in revenue would likely surpass the initial costs of purchasing buoys.
<i>Alternative A4: Authorize buoy gear use under the Swordfish General Commercial permit; establish a 5-buoy limit – Preferred Alternative</i>	This alternative may have minor economic benefits, as increased landings could lead to reduced trip costs and increased revenue. This alternative may have neutral economic benefits for supporting businesses, as increases in landings would be relatively small.	This alternative may have neutral economic costs overall. In the short term, this alternative may have neutral to minor economic costs if fishermen decide to purchase additional gear. In the long term, potential increases in revenue would likely surpass the initial costs of purchasing buoys.
Alternative A5: Authorize buoy gear use under the Swordfish Incidental LAP; maintain the 35-buoy limit	This alternative may have minor economic benefits if it results in increased landings, reduced trip costs, and increased revenue. This alternative may have neutral economic benefits for supporting businesses, as increases in landings would likely be relatively small.	This alternative may have neutral economic costs overall. In the short term, this alternative may have neutral to minor economic costs if fishermen decide to purchase additional gear. In the long term, potential increases in revenue would likely surpass the initial costs of purchasing buoys.
<i>Alternative A6: Authorize the retention of BAYS tunas caught on buoy gear dependent on permit type– Preferred Alternative</i>	This alternative may have minor economic benefits, as a result of expanded fishing opportunities and the potential for increased revenue from landing and sales of valuable species. This alternative may have neutral economic benefits for supporting	This alternative may have neutral economic costs as increase in landings may be modest.

	businesses, as increases in landings would likely be relatively small.	
<i>Alternative A7: Authorize the retention of allowable shark species caught with buoy gear dependent on permit type – Preferred Alternative</i>	This alternative may have minor economic benefits, as a result of expanded fishing opportunities and the potential for increased revenue from landing and sales of valuable species. This alternative may have neutral economic benefits for supporting businesses, as increases in landings would likely be relatively small.	This alternative may have neutral economic costs since increase in landings may be modest.
Alternative B1: Maintain current speargun fishing gear regulations – No Action	This alternative would have neutral economic benefits, as fishing practices and costs would not change. There may also be neutral economic impacts on supporting businesses for the same reason.	This alternative may have neutral economic benefits, as fishing practices and expenses would not change.
<i>Alternative B2: Authorize the retention of BAYS tunas caught with speargun fishing gear for some commercial tuna permit holders, consistent with permit retention and size limits – Preferred Alternative</i>	This alternative would have neutral to minor economic benefits from additional opportunities, expanded fishing effort, and the potential for additional revenue for fishermen. This alternative may have neutral economic benefits for supporting businesses, as increases in landings would likely be relatively small.	This alternative may have minor economic costs initially, if fishermen purchase speargun fishing gear equipment specifically for targeting BAYS tunas. In the long term, potential increases in revenue may surpass this initial cost, such that effects are neutral overall.
Alternative B3 - Authorize the retention of Atlantic bluefin tuna caught with speargun fishing gear for recreational tuna permit holders, consistent with permit retention and size limits	This alternative would have neutral economic benefits from additional opportunities. This alternative would likely result in neutral short and long-term indirect social and economic impacts to supporting businesses such as bait and tackle suppliers.	This alternative may have minor economic costs initially, if fishermen purchase speargun fishing gear equipment specifically for targeting bluefin tuna.

Alternative C1: Maintain current regulations that do not allow possession and use of small nets and other gear commonly used for bait collection on board HMS fishing vessels – No action	This alternative may have neutral economic benefits, as fishing practices and costs would not change.	This alternative may have minor economic costs. While no regulations would be modified, inadvertent violations could result in economic costs for fishermen. There may also be missed opportunities for some fishermen to save money on bait species.
<i>Alternative C2: Modify regulations to allow possession and use of small nets and other gear commonly used for bait collection on board HMS fishing vessels – Preferred Alternative</i>	This alternative may have neutral to minor economic benefits if fishermen save money on bait costs.	This alternative would have neutral economic costs as changes in fishing behavior are not expected.

5.6 CONCLUSION

As noted above, 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 obligations 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 this Executive Order. Pursuant to the procedures established to implement section 6 of E.O. 12866, the Office of Management and Budget has determined that this action is not significant.

6 Initial Regulatory Flexibility Act (IRFA)

This IRFA is conducted to comply with the RFA (5 U.S.C. 601 *et seq.*). The goal of the RFA is to minimize the economic burden of federal regulations on small entities. To that end, the RFA directs federal agencies to assess whether a proposed regulation is likely to result in significant economic impacts to a substantial number of small entities, and identify and analyze any significant alternatives to the proposed rule that accomplish the objectives of applicable statutes and minimize any significant effects on small entities.

6.1 DESCRIPTION OF THE REASONS WHY ACTION IS BEING CONSIDERED

Section 603(b)(1) of the RFA requires agencies to describe why the proposed action is being considered. Over the years, NMFS has implemented a number of gear-specific management measures to support fishery conservation and management goals. However, HMS fishing gear and techniques have evolved over time, and some management measures may need to be updated to better achieve those goals. This action considers updates to those management measures. Please see Chapter 1 for a full description of the reasons why this action is being considered.

6.2 STATEMENT OF THE OBJECTIVES OF, AND LEGAL BASIS FOR, THE PROPOSED RULE

Section 603(b)(2) of the RFA requires agencies to state the objective of, and legal basis for the proposed action. The purpose of this proposed rulemaking is to provide increased flexibility and remove inefficiencies in fisheries targeting HMS, while still achieving fishery conservation and management goals, thus increasing fishing opportunities and the ability of HMS fisheries to achieve optimum yield. Please see Chapter 1 for a full description of the objectives of, and legal basis for this action.

6.3 DESCRIPTION AND ESTIMATE OF THE NUMBER OF SMALL ENTITIES TO WHICH THE PROPOSED RULE WILL APPLY

Section 603(b)(3) of the RFA requires agencies to provide an estimate of the number of small entities to which the rule would apply. The Small Business Administration (SBA) has established size criteria for all major industry sectors in the United States, including fish harvesters. Provision is made under SBA's regulations for an agency to develop its own industry-specific size standards after consultation with the SBA Office of Advocacy and an opportunity for public comment (13 CFR § 121.903(c)). Under this provision, NMFS may establish size standards that differ from those established by the SBA Office of Size Standards, but only for use by NMFS and only for the purpose of conducting an analysis of economic effects in fulfillment of the agency's obligations under the RFA. To utilize this provision, NMFS must publish such size standards in the Federal Register, which NMFS did on December 29, 2015 (80 FR 81194). In that final rule, effective on July 1, 2016, NMFS established a small business size standard of \$11 million in annual gross receipts for all businesses in the commercial fishing industry (North American Industry Classification System (NAICS) code 11411) for RFA compliance purposes. NMFS considers all HMS permit holders to be small entities because they had average annual receipts of less than \$11 million for commercial fishing. SBA has established size standards for all other major industry sectors in the United States, including the scenic and sightseeing transportation (water) sector (NAICS code 487210, for-hire), which includes charter/party boat

entities. SBA has defined a small charter/party boat entity as one with average annual receipts (revenue) of less than \$14 million.

As discussed in Chapter 3, the proposed rule would apply to the following permits and number of permit holders (as of 2024): Swordfish Directed (167), Swordfish Handgear (79), and HMS CCSB (120) permits. The proposed rule would also apply to: Shark Directed LAP (204), Shark Incidental LAP (233), Swordfish Incidental LAP (66), Atlantic Tunas Longline LAP (229), Atlantic Tunas General category (2,489), HMS Charter/Headboat (4,247), and Swordfish General Commercial permits (619). This proposed rule would also affect HMS Angling permit holders, but those permit holders are considered individuals and not small entities under RFA. NMFS considers all HMS permit holders, both commercial and for-hire, to be small entities because they have average annual receipts (revenue) of less than their respective sector's standard of \$11 million and \$14 million. NMFS has determined that the proposed rule would not likely affect any small governmental jurisdictions. More information regarding the description of the fisheries affected, and the categories and number of permit holders can be found in the HMS SAFE Report (NMFS 2023).

6.4 DESCRIPTION OF THE PROJECTED REPORTING, RECORDKEEPING, 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

Section 603(b)(4) of the RFA requires agencies to describe any new reporting, record-keeping and other compliance requirements. The action does not contain any new collection of information, reporting, or record-keeping requirements.

6.5 IDENTIFICATION OF ALL RELEVANT FEDERAL RULES WHICH MAY DUPLICATE, OVERLAP, OR CONFLICT WITH THE PROPOSED RULE

Under section 603(b)(5) of the RFA, agencies must identify, to the extent practicable, relevant federal rules which duplicate, overlap, or conflict with the proposed action. Participants, in these fisheries, including dealers, must comply with a number of international agreements, domestic laws, and other fishery management measures. These include, but are not limited to, the Magnuson-Stevens Act, ATCA, the High Seas Fishing Compliance Act, MMPA, and ESA.. This proposed action has been determined not to duplicate, overlap, or conflict with any federal rules.

6.6 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

Under section 603(c) of the RFA, agencies must describe any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimize any significant economic impact of the proposed rule on small entities. The analysis shall discuss significant alternatives such as: 1) establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; 2) clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; 3) use of performance rather than design standards; and 4) exemptions from coverage of the rule, or any part thereof, for small entities. These categories of

alternatives are described at 5 U.S.C. § 603(c)(1)-(4). NMFS examined each of these categories of alternatives. Regarding the first, second, and fourth categories, NMFS cannot establish differing compliance or reporting requirements for small entities or exempt small entities from coverage of the rule or parts of it because all of the businesses impacted by this rule are considered small entities and thus the requirements are already designed for small entities. 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. As described in Chapter 2, NMFS analyzed several different alternatives in this proposed rulemaking; the rationales for identifying the preferred alternatives to achieve the desired objectives can also be found in Chapter 2. A summary of the description of the alternatives is provided below. Also below is the analysis required under RFA. These analyses assume that each vessel will have similar catch and gross revenues in order to show the relative impact of the proposed action on vessels.

6.6.1 Buoy Gear Management Measures

Under Alternative A1, the No Action alternative, NMFS would maintain the current buoy gear regulations. Since there would be no change to current regulations, fishing practices would not change, and as a result, there would be no change in landings, and no associated economic impacts for fishery participants or supporting businesses. Alternative A1 would likely result in neutral economic impacts on small entities participating in HMS fisheries.

Under preferred Alternative A2, NMFS would allow the use of power assistance for releasing and retrieving buoy gear. Authorizing the use of power assistance would be expected to increase fishing efficiency. This could lead to additional landings and increased sales of valuable fish species. Power assistance would likely be provided by an electric reel at a cost of approximately \$8,000 or a hydraulic rig at a cost of approximately \$2,000. While there is an upfront cost to buy the equipment, the ability to use power assistance, especially for deep-set gear, would likely increase buoy gear fishing efficiency and make buoy gear fishing operations less difficult and strenuous. Increased fishing efficiency would be achieved through quicker retrieval of gear, allowing for hooked fish to be removed and the gear to be re-deployed more quickly. These changes could increase the amount of time or the number of hooks in the water, resulting in increased catch, or reduced trip times, if the retention limit or intended catch is reached more quickly. A reduction in trip time could save on fuel and ancillary supply costs and reduce the amount of time spent fishing, allowing for time to dedicate to other endeavors. Alternatively, a reduction in trip time could allow participants to explore other fishing areas, thus increasing opportunities. If this activity is less strenuous, the chance of injuries that can impact the ability to fish and carry out other activities could be reduced, which in turn, could allow fishermen to engage in more or longer fishing trips or participate in other activities. Any increase in effort could lead to additional landings and revenue for fishermen. However, increases in effort could also lead to increased costs (*e.g.*, fuel, bait), but such decisions would be up to individual fishermen and NMFS anticipates that these costs would be offset by any additional landings. While revenues may increase, the expected increase in landings is expected to be modest. Therefore, Alternative A2 would be expected to have a minor beneficial impact on small entities participating in HMS fisheries.

Under Alternatives A3 and A4, NMFS would authorize the use of buoy gear to target swordfish under the open access Swordfish General Commercial permit. Under Alternative A3, NMFS would maintain the current buoy gear requirement limiting the maximum number of buoys that may be possessed or on board to 35. Under Alternative A4 (preferred alternative), NMFS would limit the maximum number of buoys that may be possessed or on board to 5. Both Alternative A3 and A4 would result in minor beneficial economic impacts to small entities participating in HMS fisheries, as increased landings could lead to reduced trip costs and increased revenue.

Under Alternative A5, NMFS would authorize the use of buoy gear to target swordfish under the Swordfish Incidental LAP. Alternative A5 would result in minor beneficial economic impacts to small entities participating in HMS fisheries because this Alternative could provide for expanded fishing opportunities for these permit holders. However, if these fishermen do not already own buoy gear, some of these benefits may be reduced by the cost of purchasing buoy gear.

Under preferred Alternative A6, NMFS would allow BAYS tunas to be retained with buoy gear in all areas except for the Florida Swordfish Management Area by fishermen who hold either an Atlantic Tunas General category permit or an Atlantic Tunas Longline category LAP. Alternative A6 would result in minor beneficial economic impacts to small entities participating in HMS fisheries because this Alternative could provide for expanded fishing opportunities and the potential for increased revenue from landing and sales of valuable species. However, if these fishermen do not already own buoy gear, some of these benefits may be reduced by the cost of purchasing buoy gear.

Under preferred Alternative A7, NMFS would allow some shark species to be retained with buoy gear for Shark Directed LAPs, Shark Incidental LAPs, Smoothhound Shark permits, and HMS CCSB permits (valid in the U.S. Caribbean only). Alternative A7 would likely result in minor beneficial economic impacts to small entities participating in HMS fisheries, as a result of expanded fishing opportunities and the potential for increased revenue from landing and sales of sharks. However, if these fishermen do not already own buoy gear, some of these benefits may be reduced by the cost of purchasing buoy gear.

6.6.2 Speargun Fishing Gear Management Measures

Under Alternative B1, the No Action alternative, NMFS would maintain the current regulations for speargun fishing gear use. Alternative B1 would have neutral impacts to small entities participating in HMS fisheries, as there would be no changes to the regulations and fishing practices and costs would not be expected to change.

Under preferred Alternative B2, NMFS would authorize the use of speargun fishing gear to retain BAYS tunas for permit holders who hold an Atlantic Tunas General category permit, an HMS CCSB permit, or an HMS Charter/Headboat (with a commercial endorsement and on non-for-hire trips only) permit. Alternative B2 would likely result in neutral to minor beneficial economic impacts to small entities participating in HMS fisheries as a result of increased fishing opportunities.

Under Alternative B3, NMFS would authorize the use of speargun fishing gear to retain Atlantic bluefin tuna recreationally under the HMS Angling permit, HMS Charter/Headboat permit, and

HMS CCSB permit (valid in the U.S. Caribbean only). While this alternative primarily would impact individual anglers who are not considered small entities, it would also impact HMS Charter/Headboat permit holders who are small entities. Alternative B3 would likely result in neutral economic impacts. While this alternative would allow for the recreational harvest of Atlantic bluefin tuna with speargun fishing gear, NMFS believes increases in landings by HMS Charter/Headboat permit would be minimal, as speargun fishing gear is not commonly used, and the fish would need to meet minimum recreational size requirements.

6.6.3 Bait Collection Gear Management Measures

Under Alternative C1, the No Action alternative, NMFS would maintain current regulations for primary and secondary gear authorizations. Under current regulations, the possession and use of small nets and other fishing gear commonly used for bait collection (*e.g.*, cast nets and small dipnets) is not allowed on board HMS fishing vessels. Alternative C1 would likely result in minor negative economic impacts to small entities participating in HMS fisheries, as a result of inadvertent violations and missed opportunity for targeting bait species.

Under preferred Alternative C2, NMFS would allow the possession and use of small nets and other gear commonly used for bait collection (*e.g.*, cast nets and small dipnets) on board HMS permitted vessels, provided that the gear is too small and/or too weak to capture HMS. Alternative C2 would result in minor beneficial economic impacts to small entities participating in HMS fisheries as a result of increased flexibility for targeting bait species and savings on bait costs.

7 Applicable Laws

This chapter provides summaries of how this action complies with various requirements that were not discussed in earlier chapters. These include parts of the Magnuson-Stevens Act, the CZMA, ESA, and the MMPA.

7.1 MAGNUSON-STEVENSONS ACT: THE NATIONAL STANDARDS

Section 301(a) of the Magnuson-Stevens Act requires that any fishery management plan prepared and any regulation promulgated to implement any such plan needs to be consistent with 10 National Standards (NSs) (see 16 U.S.C. 1851(a)). As described below, the analyses in this document are consistent with those NSs and the NS Guidelines (see 50 CFR part 600, Subpart D for National Standard Guidelines), subject to further consideration after public comment.

NS1 requires NMFS to prevent overfishing while achieving, on a continuing basis, optimum yield from each fishery for the U.S. fishing industry. The preferred alternatives in this document are consistent with NS1. The HMS FMP and its amendments and regulations contain conservation and management measures, including quotas, to prevent overfishing and rebuild overfished stocks in HMS fisheries. This action seeks to increase flexibility, remove inefficiencies in HMS fisheries, and support the continued achievement of fishery conservation and management goals. The preferred alternatives would support the expansion of the use of buoy and speargun fishing gear, which could result in some increase in fishing effort, distribution, and changes in catch rates. Any increases in landings are expected to be relatively small, and catch would continue to be counted against the relevant, existing quotas. The preferred alternatives thus are consistent with preventing overfishing, rebuilding overfished fisheries, and promoting the achievement of optimum yield by increasing fishing opportunities.

NS2 requires that conservation and management measures be based on the best scientific information available. The preferred alternatives in this document are consistent with NS2. The preferred alternatives consider the relevant stock status information, and data used for the analysis in this document consist of several up-to-date data sources including logbooks and electronic dealer reports from the last several years. Taken together, this information constitutes the best scientific information available and serves as the basis for the preferred alternatives.

NS3 requires that, to the extent practicable, an individual stock of fish be managed as a unit throughout its range and interrelated stocks of fish be managed as a unit or in close coordination. The HMS FMP and its amendments and regulations set forth the management units for HMS (see 50 CFR 635.2; definition of “management unit”). The preferred alternatives in this document do not change the management units and are consistent with NS3. The preferred alternatives apply to fishing gear practices and the authorization of additional permits and species. While measures do not need to be identical for areas within a management unit (50 CFR 600.320(d)(2)), the preferred alternatives -- for buoy gear (authorizing power assistance, authorizing this gear under the Swordfish General Commercial permit, and authorizing the retention of BAYS tunas and shark species on buoy gear for specific permit holders), speargun fishing gear (authorizing the commercial retention of BAYS tunas), and bait collection gear (modifying regulations to allow for small nets and other common bait collection gear (*e.g.*, cast

nets and small dipnets) to be present on board HMS fishing vessels) -- would apply throughout the management units for the associated species.

NS4 requires that conservation and management measures do not discriminate between residents of different states. Furthermore, if it becomes necessary to allocate or assign fishing privileges among various U.S. fishermen, such allocation should be fair and equitable to all fishermen; be reasonably calculated to promote conservation; and should be carried out in such a manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges. The preferred alternatives in this document are consistent with NS4. The preferred alternatives in this document apply across the entire U.S. EEZ and state waters for HMS. Thus, these management measures do not discriminate between residents of different states, consistent with NS4. If anything, these measures would provide more equitable access to the buoy gear type across regions. The preferred alternatives do not allocate or assign fishing privileges among various fishermen.

NS5 requires that conservation and management measures should, where practicable, consider efficiency in the utilization of fishery resources, with the exception that no such measure shall have economic allocation as its sole purpose. The preferred alternatives in this document are consistent with NS5. The preferred alternatives were analyzed for changes in the efficiency of utilization of the fishery resource. The purpose of this action is to provide increased flexibility and remove inefficiencies in fisheries targeting HMS, while still achieving fishery conservation and management goals, thus increasing fishing opportunities and the ability of HMS fisheries to achieve, on a continuing basis, optimum yield. None of the preferred alternatives focus solely on economic allocation, but are expected to have neutral to minor beneficial economic impacts.

NS6 states that conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches. The preferred alternatives in this document are consistent with NS6. The preferred alternatives are responsive to changes in HMS fishing gear and techniques that have occurred over time, with the goal of increasing fishing opportunities and the ability of HMS fisheries to achieve optimum yield.

NS7 states that conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication. The preferred alternatives in this document are consistent with NS7. Economic impacts of the preferred alternatives are expected to have neutral to minor beneficial economic impacts, and detailed analyses of the costs associated with each alternative are provided in the economic impacts sections of this document including in Chapters 4, 5, and 6. The preferred alternatives were also structured to avoid unnecessary duplication by taking into account existing requirements on the relevant fisheries.

NS8 states that conservation and management measures shall, consistent with the conservation requirements of the Magnuson-Stevens Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to provide for the sustained participation of such communities, and to the extent practicable, minimize adverse economic impacts on such communities. The preferred alternatives in this document are consistent with NS8. The preferred alternatives are expected to

have neutral to minor beneficial social and economic impacts on fishing communities (as described in Chapters 4, 5, and 6).

NS9 states that conservation and management measures shall, to the extent practicable, minimize bycatch, and to the extent that bycatch cannot be avoided, minimize the mortality of such bycatch. The preferred alternatives in this document are consistent with NS9. The preferred alternatives in this document expand fishing opportunities and may result in increased levels of bycatch. However, increases are expected to be modest, and HMS permit holders are required to release any prohibited species, or species that they do not or cannot retain, immediately, without removing it from the water, and in a manner that maximizes its chances of survival. Additionally, the preferred alternative for authorizing power assist for buoy gear increases fishing efficiency and may also increase post-release survivability of bycatch and incidentally caught species, as they may be released more quickly than if the gear was being retrieved by hand. Additionally, the expected changes in fishing effort, areas, or practices under the preferred alternatives are expected to be relatively small, and thus the increases in potential bycatch or increased interactions with non-target, or incidentally caught species, including protected species are expected to be relatively small.

NS10 states that conservation and management measures shall, to the extent practicable, promote the safety of human life at sea. The preferred alternatives in the document are consistent with NS10. No adverse impact to safety of life at sea is anticipated to result from these preferred alternatives. The preferred alternative to allow the use of power assistance for releasing and retrieving buoy gear would make fishing less difficult and strenuous, potentially avoiding physical injury. The other preferred alternatives would not require fishermen to travel greater distances, fish in bad weather, or otherwise fish in an unsafe manner. Fishing effort and practices are unlikely to change as a result of the preferred alternatives. While some stakeholders have expressed concern for the safety of fishermen using speargun fishing gear, the speargun fishermen themselves have not expressed such concern and currently fish with speargun fishing gear for a variety of species including some HMS. Any expansion of the gear to fish for BAYS commercially or BFT recreationally would not modify current practices for speargun fishing gear and therefore would not impact the safety of life at sea for speargun fishing gear users.

7.2 MAGNUSON-STEVENSON ACT: CUMULATIVE IMPACTS AND MITIGATION

Section 303(a)(9) of the Magnuson-Stevens Act requires that FMPs and FMP amendments include a fishery impact statement that analyzes the likely cumulative impacts of conservation and management measures and possible mitigation measures. While this rulemaking is not an FMP or FMP amendment, providing this information can provide a more comprehensive understanding of the possible effects of the rulemaking.

For the purpose of this rulemaking, we are defining a cumulative impact to be an impact on the environment that results from the incremental impact of the preferred alternatives when added to other past, present, and reasonably foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. Cumulative impacts may also include the effects of natural processes and events, depending on the specific resource in question. Cumulative impacts, including the total of all impacts to a

particular resource that have occurred, are occurring, and would likely occur as a result of any action or influence. The goal of this section is to describe the cumulative ecological, economic, and social impacts of this action on HMS fishermen and the environment, with regard to the management measures presented in this document.

Overall, preferred alternatives in this document could have neutral to minor adverse ecological impacts. While Alternative A2 could lead to increased bycatch, the level of increase is not expected to be substantial. Additionally, increased rates of post release survivability for any caught bycatch species would be expected to be higher, as power assistance would allow for faster release of those species. Under Alternative A4, neutral impacts to the target species (swordfish) would be expected, as any increases in landings would still be expected to be well below the allowable quota. While Alternative A4 would be expected to increase instances of bycatch, the level of increase would be limited, based on the limitation on the number of authorized buoys. Alternatives A6 and A7 would both be expected to have neutral impacts to both target (BAYS tunas and sharks, respectively), and non-target (bycatch and incidentally caught species). Neutral impacts under these alternatives would be expected to result in only modest increases in catch rate for both target and non-target species. The increased landings of BAYS tunas under Alternative B2 are expected to be minimal, due to low speargun gear fishing effort and the low likelihood of catching a fish that is an appropriate size for commercial purposes. Additionally, this is a highly selective gear type, and increases to bycatch or incidentally caught species would not be likely. Ecological impacts under Alternative C2 would be neutral, as the practice of bait collection is already common on HMS fishing vessels, and the new allowances would limit net and gear size to those that cannot capture HMS.

Overall, the preferred alternatives in this action would have neutral to minor beneficial social and economic impacts. Alternative A2 would support less strenuous fishing experiences, helping to avoid injury that could be associated with hand deployment and retrieval of buoy gear. Power assistance could increase fishing efficiency and lead to increased landings and increased sales for fishermen opting to use power assistance. These benefits would likely outweigh the initial cost of purchasing an electric reel or hydraulic rig. Indirect beneficial impacts would be expected for supporting businesses, but these impacts would be expected to be relatively small, in comparison with overall fishing expenditures. Under Alternative A4, Swordfish General Commercial permit holders may experience increased landings, more efficient fishing trips, and higher revenue per trip as a result of that efficiency. Additionally, under this alternative, indirect impacts to supporting businesses are likely to be neutral, as the changes in landings and equipment sales would be small, relative to overall fishing expenditures. Alternatives A6 and A7 would both be expected to support minor beneficial impacts to fishermen as a result of increased landings and sales of valuable species. Alternative C2 would allow HMS permit holders to target bait species, saving on supply costs. Additionally, this alternative would mitigate negative social impacts associated with inadvertent violations of current regulations.

The status quo or no-action alternatives would have neutral ecological and neutral to minor adverse social and economic impacts. These alternatives would maintain current regulations. Regarding Alternatives A1 and B1, maintaining current regulations would result in no change in fishing practices, impacts to target or non-target species, and no impacts on fishing costs or impacts to supporting businesses. Maintaining regulations that do not allow bait collection gear

on HMS fishing vessels under Alternative C1 would not be expected to impact species targeted for bait collection, as this is already a common practice on HMS fishing vessels. However, maintaining these regulations would maintain a mismatch in current practice and the regulations, resulting in inadvertent violations.

Non-preferred alternatives A3, A5, and B3 would have neutral to minor adverse ecological impacts. Alternative A3 would likely have neutral impacts on swordfish, which is a healthy stock and has an underutilized quota, but lead to increased levels of bycatch as a result of expanded use of buoy gear. These alternatives would allow a higher maximum number of buoys allowed (35) in comparison with the preferred alternative (5). However, unlike expansion under the Swordfish General Commercial permit, as considered under Alternatives A3, Alternative A5 would consider authorizing the use of buoy gear to a smaller number of Swordfish Incidental LAP holders compared with the Swordfish General Commercial permit (66 vs. 619, respectively). Alternative B3 would have neutral impacts both on the target species (bluefin tuna) and bycatch or incidentally caught species.

Non-preferred alternatives would have neutral to minor beneficial social and economic impacts. Increased fishing opportunities considered under Alternatives A3 and A5 would all expand fishing opportunities and provide the chance for fishermen to increase landings. These alternatives would also have neutral impacts to supporting businesses such as seafood dealers and bait and tackle suppliers, as increases in landings would be small in the context of total landings.

Mitigation is an important mechanism that federal agencies can use to minimize, prevent, or eliminate damage to the human and natural environments associated with their actions. Mitigation efforts may include one or more of the following: avoiding the impact by not taking a certain action or parts of an action; minimizing impacts by limiting the degree or magnitude of the action and its implementation; rectifying the impact by repairing, rehabilitating, or restoring the affected environment; reducing or eliminating the impact over time through preservation and maintenance operations during the life of the action; and compensating for the impact by replacing or providing substitute resources or environments. If needed, NMFS may consider mitigation, provided that the mitigation efforts do not circumvent the goals and objectives of the rulemaking or the mandate to rebuild fisheries under the Magnuson-Stevens Act. None of the alternatives, preferred or not, would damage the human or natural environments. As a mitigation measure, Alternative A4 would limit the number of buoys Swordfish General Commercial permit holders could possess or deploy to five buoys. Limiting the number of buoys per vessel to five is an appropriate approach since this is an open access permit held by a larger number of vessels than the limited access permits currently authorized for buoy gear use. Initially limiting to five buoys per vessel would allow for the new gear to be introduced to a new group of commercial fishing vessels and data to be collected before considering authorizing a higher number of buoy gears per vessel in the future. Limiting the number of buoys to five per vessel would reduce the amount of additional gear in the water and may be especially appropriate given the free-floating nature of individual buoy gears which can be more challenging to keep track of.

7.2 MAGNUSON-STEVENSON ACT: ESSENTIAL FISH HABITAT

Pursuant to section 305(b)(1) of the Magnuson-Stevens Act (16 U.S.C. 1855(b)(1)), and as implemented at 50 CFR 600.815, the Magnuson-Stevens Act requires NMFS to identify and describe EFH for each life stage of managed species and to evaluate the potential adverse effects of fishing activities on EFH, including the cumulative effects of multiple fisheries activities. If NMFS determines that fishing gears are having an adverse effect on HMS EFH, or other species' EFH, then NMFS must include management measures that minimize adverse effects to the extent practicable.

NMFS originally described and identified EFH and related EFH regulatory elements for all HMS in the management unit in the 1999 FMP. Since then, NMFS has reviewed available data and modified HMS EFH numerous times. Specific to the actions in this document, in the HMS FMP and Amendment 1 to the HMS FMP (finalized in 2009), NMFS reviewed the various HMS gear types to determine whether those gear types had the potential to affect EFH. Based on the best scientific information available at that time, NMFS determined that there was no evidence that physical effects caused by any authorized HMS gears were affecting EFH for targeted or non-targeted species, to the extent that physical effects can be identified on the habitat or the fisheries. In 2015, NMFS completed an HMS EFH 5-year review to investigate additional effects of HMS fishing gears on HMS EFH since Amendment 1. NMFS did not find any significant changes in effects to HMS EFH from HMS and non-HMS fishing gear types and no new information that any authorized HMS gear would have adverse effects on EFH. Based on findings from the 2015 HMS EFH 5-year review, updates were made to HMS EFH in Amendment 10 (82 FR 42329, September 7, 2017).

NMFS recently completed an HMS EFH 5-year review (89 FR 27716, April 18, 2024) to gather all new information and determine whether modifications to existing EFH descriptions and designations are warranted. Based on the Final HMS EFH 5-Year Review, NMFS determined that EFH modifications are warranted, which will be completed through Amendment 17 to the HMS FMP. The information used in the 5-year review did not indicate that any gears authorized in HMS fisheries would have an adverse effect on EFH.

While the preferred alternatives in this action modify the species that could be caught by currently authorized gear types (Alternatives A6 and A7), provide for modifications to assist with fishing the gear (Alternative A2), and allow the possession and use of small nets and other gear commonly used for bait collection (*e.g.*, cast nets and small dipnets) on board HMS fishing vessels (Alternative C2), none of these alternatives change the fishing gear types authorized relative to the status quo nor do they change the overall range of HMS fishing. Additionally, with the exception of bait collection gear, the gears being considered in this action are pelagic gears that are fished within the water column and do not come in contact with any particular habitat or habitat structure (*e.g.*, coral). Bait collection gear would not be authorized for HMS fisheries, so impacts to habitat are not analyzed. Therefore, the preferred alternatives in the context of the fishery as a whole would not have an adverse effect on EFH and an EFH consultation is not required.

7.3 COASTAL ZONE MANAGEMENT ACT

The CZMA (16 U.S.C. 1451 *et seq.*) 1972; reauthorized in 1996) requires that federal actions be consistent, to the extent practicable, with the enforceable policies of all state coastal zone management programs. NMFS finds the alternatives analyzed in this action to be consistent to the maximum extent practicable with the enforceable policies of states that have approved coastal zone management programs. NMFS is seeking concurrence with respect to the preferred alternatives and will ask for states' agreement with this determination during the proposed rule stage.

7.4 PAPERWORK REDUCTION ACT

This action contains a collection-of-information requirement subject to review and approval by OMB under the Paperwork Reduction Act (PRA). The preferred alternatives would revise and extend the existing requirements for the collection of information 0648-0373, "Atlantic HMS Vessel and Gear Marking," by expanding the number of permit categories that are authorized to use buoy gear. Specifically, it would expand the authorization to use buoy gear to vessels possessing an open access Swordfish General Commercial or Atlantic Tunas General category permit, thus necessitating a revision to the gear marking burden estimates covered by this information collection. Buoy gear is primarily used to target swordfish, and NMFS is preferring to allow Swordfish General Commercial permit holders to fish up to five buoys at once. This would necessitate them to mark up to five buoys with their permit and vessel information, increasing the burden estimates under 0648-0373 by 619 respondents (number of Swordfish General Commercial permit holders), 3,095 responses (number of buoys marked), and 774 burden hours (15 minutes per buoy) at a cost of \$46,425 for marine paint and stencils. The preferred alternatives would also authorize the use of buoy gear to land BAYS tunas and sharks by several HMS permit categories. However, these species are only caught incidentally with buoy gear, and the permits in question are generally held in combination with other swordfish permits that are already included in this information collection. As such, no further changes in the burden estimates have been incorporated for these proposed changes, as they are not anticipated to result in the marking of additional gear. Public comment is sought regarding these preferred alternatives.

7.5 PROTECTED RESOURCES

The ESA is the primary federal legislation governing interactions between fisheries and species listed as threatened or endangered and effects on ESA-listed critical habitat. Through a consultation process, the ESA requires federal agencies to evaluate actions they authorize, fund, or carry out that may affect a listed species. In the case of marine fisheries, NMFS Office of Sustainable Fisheries consults with the Office of Protected Resources to determine what effects fishery management actions could have on threatened or endangered marine species and what actions can be taken to reduce or eliminate negative effects. Under the ESA Section 7 consultation process, if a federal agency determines its action is likely to adversely affect a species, or destroy or adversely modify critical habitat, the agency engages in formal consultation with NMFS. At the conclusion of formal consultation, NMFS issues a Biological Opinion that analyzes the effects of the action. If NMFS concludes that the action will jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat, NMFS specifies Reasonable and Prudent Alternatives to the proposed action. If

NMFS concludes that the action will not jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat, NMFS specifies Reasonable and Prudent Measures and Terms and Conditions to mitigate the effects of the action and authorizes any allowable “incidental take” of the species.

In May 2020, NMFS issued a Biological Opinion for the Atlantic HMS non-pelagic longline fisheries. This Biological Opinion stated that the continued operation of HMS fisheries is not likely to jeopardize the continued existence of sea turtles, sawfish, Atlantic sturgeon, scalloped hammerhead sharks (Central and Southwest Atlantic Distinct Population Segment), oceanic whitetip sharks, and giant manta ray. This action is not anticipated to affect the above-referenced ESA-listed species in any way not previously analyzed for existing regulations, including the provision for exempted fishing activities, and there is no new information that would alter this conclusion.

The MMPA established a national policy to prevent marine mammal species and population stocks from declining beyond the point where they ceased to be significant functioning elements of the ecosystems of which they are a part. The MMPA prohibits, with certain exceptions, the "take" of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the United States. The Southeastern U.S. Atlantic, Gulf of America, and Caribbean commercial hook and line fishery (including rod and reel, handlines, greenstick, bandit gear, and buoy gear) are considered a Category III fishery under the MMPA, those with remote likelihood of causing serious injury or mortality to marine mammals. Speargun fishing gear is considered a recreational fishing activity and is not categorized since they are not considered commercial fishing vessels. Under the proposed rule, certain commercial permit holders (those with the Atlantic Tunas General category permit, the HMS Charter/Headboat permit with a commercial endorsement and on non-for-hire trips only, and the HMS CCSB permit) may be authorized to use speargun fishing gear to retain BAYS tunas. No determination has been made on this gear in the list of fisheries under MMPA based on the proposed rule changes. However, given that the Hawaiian spearfishing fishery is classified as Category III and similar to the HMS speargun fishery, we expect the speargun fishery would be considered as Category III given that there have been no takes of marine mammals due to the selective nature of the gear. Commercial vessel owners or operators, or fishermen, in Category II or III fisheries must report all incidental mortalities and injuries of marine mammals during the course of commercial fishing operations to NMFS. There are currently no regulations requiring recreational fishermen to report takes, nor are they authorized to have incidental takes (*i.e.*, they are illegal). NMFS does require reporting and authorizes takes by charter/headboat fishermen (considered “commercial” by MMPA).

Please refer to Sections 3.8 and 3.9.9 of the HMS FMP and Chapter 6 of the HMS SAFE Report for additional information on the protected species and marine mammals in the area of HMS fisheries.

The preferred alternatives considered in this action (A2, A4, A6, A7, B2, and C2) are likely to have neutral effects on protected resources, including sea turtles, sharks listed under the ESA, or

marine mammals protected by the MMPA. The purposes of the preferred alternatives are to provide increased flexibility and remove inefficiencies in fisheries targeting HMS, while still achieving fishery conservation and management goals, thus increasing fishing opportunities and the ability of HMS fisheries to achieve optimum yield. While preferred alternatives A2, A4, A6, and A7 could increase fishing gear effort using buoy gear, this gear type is a tended gear with fishermen watching for indications of a hooked fish and then quickly retrieving to maintain fish quality. Selectivity of this gear type is high with low bycatch and incidental catch. We do not expect an increase in interactions with protected resources such as those listed above. The use of power assistance which would be authorized under Alternative A2 would reduce time on the line, potentially increasing post-release survivability. Additionally, as described in the description of the buoy gear fishery in Chapter 3 of the EA, logbook data from 2016 through 2023 indicate that there has been no catch of protected resources. Alternative B2, which would authorize the use of speargun fishing gear for the retention of BAYS tunas would not be expected to increase interactions with protected resources, as this gear type is not commonly used, and is highly selective. The bait collection gear allowed under C2 would not be large enough to capture HMS, or protected resources such as those listed above. If any smaller individuals of those species were to be captured, they would be quickly removed and released, as cast nets and small dipnets would be actively tended. For all of these reasons, each of the preferred alternatives would have neutral direct and indirect impacts in the short and long term on protected resources.

Similar to the preferred alternatives described above, the other alternatives considered for buoy gear (A3 and A5) and speargun fishing gear use (B3) would be expected to have neutral direct and indirect impacts in the short and long term on protected resources, for the same reasons as described above for the different gear types, respectively.

The No Action alternatives considered for buoy gear (A1), speargun fishing gear (B1) and bait collection gear (C1) would not implement any new management measures. As a result, no impacts to protected resources would be expected from the status quo.

8 List of Agencies and Persons Consulted

The development of this rulemaking involved input from many people including NMFS staff, NMFS contractors, the public, constituent groups, and the HMS Advisory Panel. Staff and contractors from the HMS Management Division, in alphabetical order, who worked on this document include:

- Heather Baertlein, Data Management Specialist
- Randy Blankinship, Division Chief
- Karyl Brewster-Geisz, Branch Chief
- Becky Curtis, Fishery Management Specialist
- Tobey Curtis, Fishery Management Specialist
- Steve Durkee, Fishery Management Specialist
- Guy DuBeck, Fishery Management Specialist
- Cliff Hutt, Fishery Management Specialist
- Brad McHale, Branch Chief
- Sarah McLaughlin, Management and Program Analyst
- Anna Quintrell, Fishery Management Specialist
- George Silva, Economist
- Ann Williamson, Fishery Management Specialist
- Jackie Wilson, Fishery Management Specialist

The development of this document also involved considerable input from other staff members and Offices throughout NOAA including, but not limited to the Office of the General Counsel, Southeast Fisheries Science Center, and Northeast Fisheries Science Center.

Highly Migratory Species Management Division (F/SF1)
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910
Phone: (301) 427-8503

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