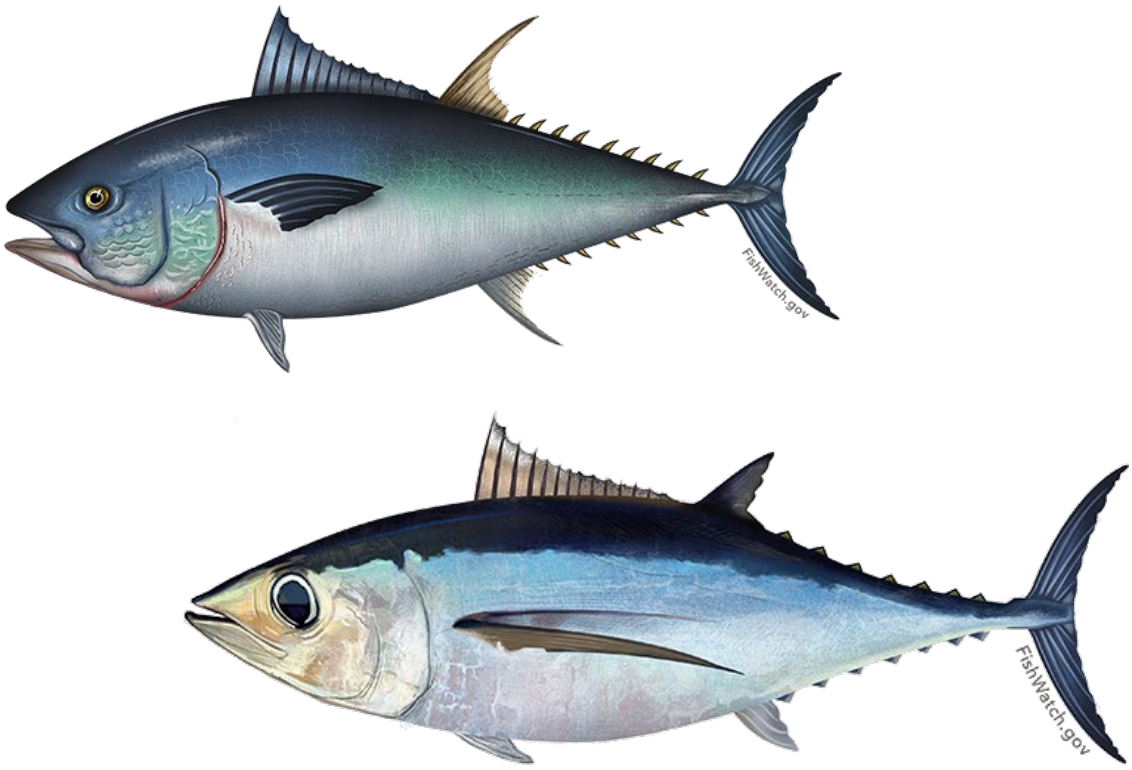
Draft Environmental Assessment,
Regulatory Impact Review,

and

Initial Regulatory Flexibility Analysis

for the

2022 Atlantic Bluefin Tuna and Northern Albacore Quota Rule



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

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ABSTRACT

Action: Modify the baseline annual U.S. quota and subquotas for Atlantic bluefin tuna and modify the baseline annual U.S. North Atlantic albacore (northern albacore) quota to reflect current ICCAT recommendations.

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

Lead Agency: National Marine Fisheries Service (NOAA Fisheries): Office of Sustainable Fisheries

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Abstract: This proposed action is necessary to implement binding recommendations of the International Commission for the Conservation of Atlantic Tunas (ICCAT), as required by the Atlantic Tunas Convention Act (ATCA), and to achieve domestic management objectives under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). This action would increase the baseline annual U.S. bluefin tuna quota from the 1,247.86 mt level established via a 2018 quota rule to 1,316.14 mt, the level recommended for 2022 by ICCAT at its 2021 annual meeting. The ICCAT-recommended bluefin tuna quota proposed in this action would be divided among the established regulatory domestic bluefin tuna subquota categories. This action also would modify the baseline annual U.S. northern albacore quota from the 632.4-mt level established in the 2018 quota rule to a baseline quota of 711.5 mt, anticipating that new baseline quotas would be implemented every three years with a maximum of 950 mt based on the northern albacore management procedure adopted by ICCAT.

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1.0 INTRODUCTION

1.1 Regulatory Authorities

The National Marine Fisheries Service (NOAA Fisheries), on behalf of the Secretary of Commerce, is responsible for managing Atlantic highly migratory species[1] (HMS) fisheries, including the Federal Atlantic shark, tuna, billfish, and swordfish fisheries, under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act; 16 U.S.C. 1801 et seq.), Section 304(g), and the Atlantic Tunas Convention Act (ATCA; 16 U.S.C. 971 et seq.). Under the Magnuson-Stevens Act, NOAA Fisheries must, consistent with ten National Standards, manage fisheries to maintain optimum yield on a continuing basis, while preventing overfishing. Since 1993, NOAA Fisheries has implemented several fishery management plans (FMPs), FMP amendments, and numerous regulations relating to Atlantic HMS fisheries under the authority of the Magnuson-Stevens Act. Currently, Atlantic HMS fisheries are managed under the 2006 Consolidated Atlantic HMS FMP (2006 Consolidated HMS FMP), its amendments, and implementing regulations at 50 Code of Federal Regulations (CFR) part 635.

In accordance with the Magnuson-Stevens Act and the National Environmental Policy Act, the alternatives in this Environmental Assessment (EA) analyze the potential environmental, economic, and social impacts of options that could increase baseline annual U.S. quotas for western Atlantic bluefin tuna and North Atlantic albacore (northern albacore) consistent with 2021 International Commission for the Conservation of Atlantic Tunas (ICCAT) recommendations. Atlantic bluefin tuna, bigeye tuna, albacore tuna, yellowfin tuna, and skipjack tuna ("Atlantic tunas") are managed under the dual authority of the Magnuson-Stevens Act and ATCA, which authorizes the Secretary of Commerce (Secretary) to promulgate regulations as may be necessary and appropriate to implement recommendations of ICCAT. The authority to issue regulations under the Magnuson-Stevens Act and ATCA has been delegated from the Secretary to the Assistant Administrator for Fisheries, NOAA. 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, 42 U.S.C. §§ 4321 *et seq.*), the Endangered Species Act (ESA), the Marine Mammal Protection Act (MMPA), and the Coastal Zone Management Act. This document is prepared, in part, to comply with NOAA Fisheries' responsibilities under NEPA, as implemented by the regulations published by the Council on Environmental Quality (CEQ), 50 CFR parts 1501-1508[2], and NOAA Administrative Order 216-6A (NAO 216-6A): Compliance with the National Environmental Policy Act, Executive Orders 12114, Environmental Effects Abroad of Major Federal

[1] The Magnuson–Stevens Act, Section 3, defines the term "highly migratory species" as tuna species, marlin (*Tetrapturus* spp. and *Makaira* spp.), oceanic sharks, sailfishes (*Istiophorus* spp.), and swordfish (*Xiphias gladius*). 16 U.S.C. § 1802(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*). 16 U.S.C. § 1802(44).

[2] This EA is being prepared using the 2020 CEQ NEPA Regulations. The effective date of the 2020 CEQ NEPA Regulations was September 14, 2020, and reviews begun after this date are required to apply the 2020 regulations unless there is a clear and fundamental conflict with an applicable statute. 85 Fed. Reg. at 43372-73 (§§ 1506.13, 1507.3(a)). This EA began in December 2021 and accordingly proceeds under the 2020 regulations.

Actions; 11988 and 13690, Floodplain Management; and 11990, Protection of Wetlands, issued April 22, 2016.

1.2 Management History

A thorough description of HMS management history is provided in Section 1.1 of the Final Environmental Impact Statement (FEIS) for Amendment 7 to the 2006 Consolidated HMS FMP (Amendment 7) (NOAA Fisheries, 2014) available at https://www.fisheries.noaa.gov/action/amendment-7-2006-consolidated-hms-fishery-management-plan-bluefin-tuna-management and Section 1.1 of the Draft Environmental Impact Statement (DEIS) for Amendment 13 to the 2006 Consolidated HMS FMP (Amendment 13) (NOAA Fisheries, 2021) available at https://www.fisheries.noaa.gov/action/amendment-13-2006-consolidated-hms-fishery-management-plan-bluefin-management-measures. The information below supplements that management history with information specific to recent bluefin tuna and northern albacore quota management.

Bluefin Tuna Annual Quota and Quota Adjustment Process

Since 1982, ICCAT has recommended a Total Allowable Catch (TAC) of western Atlantic bluefin tuna, and since 1991, ICCAT has recommended specific limits (quotas) for the United States and other western Atlantic bluefin tuna Contracting Parties and Cooperating non-Contracting Parties, Entities and Fishing Entities (hereafter referred to as "Contracting Parties" for simplicity). ICCAT adopted a 20-year rebuilding program for western Atlantic bluefin tuna in 1998. The rebuilding plan period was set as 1999 through 2018. In 2017, ICCAT adopted an interim conservation and management plan for western Atlantic bluefin tuna to transition from the rebuilding program to a long-term management strategy for the stock. Under this interim measure, ICCAT adopted a new bluefin tuna quota, which NOAA Fisheries implemented in the 2018 quota rule (83 FR 51391, October 11, 2018). ICCAT sets bluefin tuna conservation and management measures, including TACs, following consideration of the latest stock assessment information and management advice provided by ICCAT's scientific body, the Standing Committee on Research and Statistics (SCRS).

NOAA Fisheries implemented the Fishery Management Plan for Atlantic Tunas, Swordfish, and Sharks (1999 FMP) in July 1999 (64 FR 29090, May 28, 1999; NOAA Fisheries, 1999). The 1999 FMP included framework provisions to promulgate annual quota specifications for the bluefin tuna fishery, in accordance with ATCA and the Magnuson-Stevens Act, and to implement ICCAT recommendations. Effective November 1, 2006, NOAA Fisheries implemented final regulations for the 2006 Consolidated HMS FMP, which consolidated management of all HMS into one FMP (71 FR 58058, October 2, 2006). Among other things, the 2006 Consolidated HMS FMP maintained the allocation percentages established in the 1999 FMP for dividing the baseline annual U.S. bluefin tuna quota among several domestic quota categories. The FEIS for the 2006 Consolidated HMS FMP evaluated and analyzed the environmental impacts of a number of alternatives regarding the bluefin tuna quota including subquotas, time periods, and inseason management. The FEIS indicated that additional environmental impact analyses would accompany the annual bluefin tuna quota specifications only if the analyses associated with the 2006 Consolidated HMS FMP no longer

applied (e.g., if ICCAT were to amend its recommendation regarding the total U.S. bluefin tuna quota or if environmental conditions were to change). Subsequent to publication of the 2006 Consolidated HMS FMP, bluefin tuna TACs and U.S. quotas were adjusted by ICCAT in 2006 (Recommendation 06-06), 2008 (Recommendation 08-04), and 2010 (Recommendation 10-03).

In August 2014, NOAA Fisheries published an FEIS, Final Regulatory Impact Review, Final Regulatory Flexibility Analysis, and Final Social Impact Statement for Amendment 7. In December 2014, NOAA Fisheries published the final rule to implement Amendment 7 (79 FR 71510, December 2, 2014). Amendment 7 was designed to meet domestic management objectives consistent with the requirements of the Magnuson-Stevens Act including preventing overfishing, achieving optimal yield, and minimizing bycatch to the extent practicable, as well as the objectives of ATCA and obligations pursuant to binding recommendations of ICCAT. NOAA Fisheries took several actions to reduce bluefin tuna dead discards and account for dead discards in all fishing categories; optimize fishing opportunities in all categories; enhance reporting and monitoring; and adjust other aspects of the 2006 Consolidated HMS FMP as necessary. In Amendment 7, NOAA Fisheries also changed the way that it adjusts the U.S. annual bluefin tuna quota for the previous year's underharvest, if any. Rather than publish proposed and final rules for such quota adjustments annually, NOAA Fisheries, through the regulations established in Amendment 7, now adjusts the bluefin tuna Reserve category quota to the extent that underharvest from the previous year is available, through a temporary final rule. Such adjustments are made consistent with ICCAT limits on carryover of underharvested quota and calculated when complete bluefin tuna catch information for the prior year is available and finalized. NOAA Fisheries then may allocate quota from the Reserve category to other bluefin tuna fishing categories after considering regulatory determination criteria described at 50 CFR 635.27(a)(8), or for scientific research. Most of the Amendment 7 measures, including the "codified bluefin tuna quota reallocation" measures, took effect January 1, 2015.

In 2014, ICCAT increased the bluefin tuna quota under Recommendation 14-05, accordingly increasing the U.S. quota as well. The environmental impacts of domestic implementation of the new baseline annual U.S. bluefin tuna quota were analyzed in a 2015 EA. The EA considered the effects of increasing the baseline annual U.S. bluefin tuna quota from the 923.7-mt level established by ICCAT Recommendation 10-03 and a 2011 quota rule (76 FR 39019, July 5, 2011) to the ICCAT-recommended level of 1,058.79 mt for each of 2015 and 2016 (80 FR 52198, August 28, 2015). For 2017, ICCAT through Recommendation 16-08 maintained the quota levels from the previous recommendation through 2017, and NOAA Fisheries determined that no additional environmental analysis or rulemaking was required to maintain that quota level.

In 2017, ICCAT adopted a recommendation regarding western Atlantic bluefin tuna management, based on the 2017 stock assessment conducted by the SCRS. Through ICCAT Recommendation 17-06, ICCAT recommended an increase to the bluefin tuna TAC. (See the description of recent ICCAT bluefin tuna recommendations in Appendix 1.) In the subsequent 2018 quota rule, the U.S. quota accordingly was increased to 1,247.86 mt, which was then divided among the domestic subquota categories. The environmental impacts of domestic implementation of an updated baseline annual U.S. bluefin tuna quota were analyzed in a 2018 EA.

In 2020, ICCAT adopted a recommendation regarding western Atlantic bluefin tuna management, based on the 2020 stock assessment update conducted by the SCRS. Recommendation 20-06 maintained the overall bluefin tuna TAC and U.S. quota adopted under Recommendation 17-06 for 2021. Consistent with SCRS advice to allow for a more thorough analysis of the western Atlantic bluefin tuna stock status, Recommendation 20-06 provided for a 2021 stock assessment that would incorporate the most recent available data, including any new abundance indices. In 2021, NOAA Fisheries analyzed the impacts of adjusting the 2021 quota in the context of the 2020 stock assessment update information developed by the ICCAT SCRS in a rule adjusting the 2021 baseline quotas for northern albacore and North and South Atlantic swordfish, and the Atlantic bluefin Reserve category, based on available underharvest of the 2020 adjusted U.S. quotas (86 FR 54659, October 4, 2021).

In May 2021, NOAA Fisheries published the DEIS and proposed rule for Amendment 13 (86 FR 27686, May 21, 2021). This action is not yet final. Amendment 13 proposes a number of modifications to bluefin tuna management measures, including to revise the bluefin tuna category allocation percentages. Under current regulations, each subquota category (including the Longline category) is annually allocated a percentage of the U.S. bluefin tuna quota after 68 mt (i.e., the historical 68-mt dead discard allowance, as described in Amendment 7) is subtracted from the baseline quota and allocated to the Longline category. This process was intended to have all bluefin tuna subquota categories contribute proportionally to 68 mt provided to the Longline category annually. The proposed rule would eliminate the two-step process and, instead, make slight revisions to the category allocation percentages to account for the 68 mt in the Longline category quota. The Longline category quota percentage would increase from 8.1 percent to 13.1 percent and the other category allocation percentages would be slightly modified accordingly. This methodology would apply regardless of the annual quotas.

In addition, Amendment 13 proposes to discontinue the Purse Seine category through redistribution of Purse Seine category quota effective upon implementation of the Amendment 13 final rule. NOAA Fisheries proposed to reallocate the Purse Seine category quota proportionally to the other directed bluefin quota categories (General, Angling, and Harpoon) and the Reserve category. For each category, the current and proposed quota percentages, respectively, are as follows: General category: 47.1 percent, 55.8 percent; Angling category: 19.7 percent, 23.4 percent; Harpoon category: 3.9 percent, 4.6 percent; and Reserve category: 2.5 percent, 3.0 percent. NOAA Fisheries received comments both in support of and against the proposal to discontinue the Purse Seine category and reallocate the bluefin tuna quota upon implementation of Amendment 13. NOAA Fisheries also received comments both in support of and against the preferred alternative of reallocating Purse Seine category quota proportionally to directed bluefin tuna categories. Comments opposed to this alternative were in support of reallocating Purse Seine category quota to the Longline category as well.

In November 2021, ICCAT adopted a recommendation regarding western Atlantic bluefin tuna management, based on the 2021 stock assessment conducted by the SCRS. Recommendation 21-07 extends the interim conservation and management plan for western Atlantic bluefin tuna for 2022. Through Recommendation 21-07, ICCAT recommended an increase to the bluefin tuna TAC and an

increase in the U.S. quota to 1,316.14 mt for 2022. The increased U.S. quota would be implemented in this action and divided among the domestic subquota categories. Consistent with Recommendation 21-07, ICCAT anticipates that the SCRS will complete a management strategy evaluation (MSE) process for bluefin tuna, including providing candidate management procedures (MPs) to ICCAT for consideration, in 2022, with a view to ICCAT's adoption of an MP to set TACs for 2023 onward.

MPs (sometimes called harvest strategies) include stock monitoring, harvest control rules (HCRs), and MSE. HCRs implement pre-agreed management actions that will occur in response to various stock status and other performance indicators to help ensure identified management objectives are achieved. MSE is an inclusive, interactive, and iterative process for evaluating the performance of potential HCRs and reference points (such as target biomass) in relation to management objectives, including the risk associated with not achieving those objectives.

Northern Albacore Annual Quota and Quota Adjustment Process

Since 1998, ICCAT has adopted recommendations regarding the northern albacore fishery, including quotas for the major harvesters. ICCAT sets northern albacore conservation and management measures, including TACs, following consideration of the latest stock assessment information and management advice provided by the SCRS. In 2009, ICCAT established a northern albacore rebuilding program, setting a 28,000-mt TAC and including several provisions to limit catches by Contracting Parties (for major and minor harvesters), and reducing the amount of unharvested quota that could be carried forward from 50 percent to 25 percent of a Contracting Party's baseline annual quota.

In Amendment 7, NOAA Fisheries implemented the baseline annual U.S. northern albacore quota of 527 mt to implement ICCAT Recommendation 13-05 and established provisions for the accounting of overharvest and underharvest of the quota via annual specifications (79 FR 71510, December 2, 2014). These measures took effect January 1, 2015. Since then, NOAA Fisheries has adjusted the quota to account for available underharvest annually.

In 2017, ICCAT adopted a recommendation regarding northern albacore management, based on the stock assessment conducted by the SCRS in 2016 as well as other analyses regarding candidate HCRs conducted in 2017. Through ICCAT Recommendation 17-04, ICCAT recommended an increase to the northern albacore TAC. (See the description of recent ICCAT northern albacore recommendations in Appendix 1.) In response, NOAA Fisheries implemented a northern albacore quota of 632.4 mt in the 2018 quota rule (83 FR 51391, October 11, 2018).

At the 2020 ICCAT annual meeting, following the results of the 2020 northern albacore stock assessment and application of the interim HCR, the northern albacore TAC was increased from 33,600 mt to 37,801 mt, and the baseline U.S. northern albacore quota was increased from 632.4 mt to 711.5 mt (12.5 percent), for 2021 (Recommendation 20-04). Given provisions in Recommendation 20-04, it was possible the U.S. northern albacore quota might change at the ICCAT annual meeting in 2021. In anticipation of such a change and to decrease administrative burden, NOAA Fisheries did not alter the HMS regulations to incorporate the 2021 quota increase at that time (86 FR 54659,

October 4, 2021). Since domestic landings are typically less than 50 percent of the baseline quota, and since the domestic fishery is limited by management measures other than the quota, changing the regulations was unlikely to result in increased fishing opportunities or harvest.

In 2021, ICCAT adopted Recommendation 21-04, which established an MP that resulted in maintaining the 2021 TAC of 37,801 mt (set using the initial HCR) for 2022 and 2023, including the annual U.S. quota of 711.5 mt. The MP establishes reference points, dictates that stock assessments shall be conducted every three years, sets a three-year constant annual TAC (beginning for the 2024-2026 management period) using values estimated from each stock assessment, and contains an HCR. The parameters of the HCR include the following: "the maximum catch limit recommended is 50,000 mt in order to avoid adverse effects of potentially inaccurate stock assessments," and the maximum change in the catch limit shall not exceed 25 percent in case of increase or 20 percent in case of decrease of the previous recommended catch limit when the current biomass is greater than or equal to the biomass threshold level. The recommendation called on the SCRS to test further HCRs supporting management objectives over 2022-2023. Additionally, the recommendation called on the Commission to review the MP established to consider if any revisions are needed, taking into account any further analyses of HCRs in 2022 or 2023.

1.3 Proposed Action and Purpose and Need for Action

NOAA Fisheries' proposed action here is to modify the annual U.S. baseline bluefin tuna quota to the levels adopted by ICCAT in 2021 and accordingly adjust the bluefin tuna subquotas per the existing regulatory formula for quota distribution among the domestic bluefin tuna quota categories. It also would modify the annual U.S. baseline northern albacore quota and analyze impacts of an allowable upper limit for future northern albacore U.S. quotas generated by application of the current ICCAT MP. The purpose of this action is to implement the 2021 ICCAT recommendations regarding western Atlantic bluefin tuna and northern albacore, as necessary and appropriate pursuant to ATCA, and to achieve domestic management objectives under the Magnuson-Stevens Act. The objectives of this action are to implement the 2021 ICCAT bluefin tuna and northern albacore recommendations and distribute the U.S. bluefin tuna quota among domestic subquota categories using the existing regulatory formula for quota distribution established and analyzed in Amendment 7. This action is needed because bluefin tuna and northern albacore quotas, as well as bluefin tuna allocations and resulting subquotas, are codified in the HMS regulations at 50 CFR § 635.27, and a rule is needed to modify them.

NOAA Fisheries is preparing this EA consistent with NEPA, analyzing alternatives regarding implementation of the ICCAT-recommended bluefin tuna and northern albacore quotas in order. The EA will also ensure consistency with the objectives of the 2006 Consolidated HMS FMP, as amended, and its implementing regulations; applicable law; ICCAT Recommendation 21-07 (Recommendation by ICCAT for an Interim Conservation and Management Plan for Western Atlantic Bluefin Tuna); and ICCAT Recommendation 21-04 (Recommendation by ICCAT Conservation And Management Measures, including a Management Procedure and Exceptional Circumstances Protocol, for North Atlantic Albacore). This EA also considers the upper end of a

range of potential northern albacore domestic quota levels for northern albacore consistent with the adopted MP.

1.4 Scope and organization of this document

In considering the management measures outlined in this document, NOAA Fisheries is responsible for complying with a number of Federal statutes, including NEPA. Under NEPA, the purpose of an EA is to provide sufficient evidence and analysis of potential impacts of the proposed action to determine whether to prepare an EIS or a finding of no significant impact (FONSI) and to document the Agency's compliance with NEPA when no EIS is necessary.

This EA assesses the potential environmental, economic, and social impacts of modifying the baseline annual U.S. quota and subquotas for bluefin tuna and modifying the baseline annual U.S. northern albacore quota while analyzing an upper limit on the quota under the existing MP. The sections that follow describe the management measures and potential alternatives (Section 2), the affected environment as it currently exists (Section 3), the probable consequences on the human environment that may result from the implementation of the management measures and their alternatives, including the potential impacts on the fishery (Section 4), and any mitigating measures (Section 5).

In developing this document, NOAA Fisheries adhered to the procedural requirements of NEPA, the CEQ regulations for implementing NEPA (40 C.F.R. 1500-1508) (see footnote 2, above), and NOAA's procedures for implementing NEPA. NOAA Administrative Order (NAO) 216-6 identifies NOAA's procedures to meet the requirements of NEPA to:

- Fully integrate NEPA into the agency planning and decision making process;
- Fully consider the impacts of NOAA's proposed actions on the quality of the human environment;
- Involve interested and affected agencies, governments, organizations and individuals early in the agency planning and decision making process when significant impacts are or may be expected to affect the quality of the human environment from implementation of proposed major Federal actions; and
- Conduct and document environmental reviews and related decisions appropriately and efficiently.

The following definitions, from the NEPA regulations and NOAA guidance, were generally used to characterize the nature of the various impacts evaluated in this EA. Section 4 describes more specifically how these definitions were used for each alternative.

- Short-term or long-term impacts. These characteristics are determined on a case-by-case basis and do not refer to any rigid time period. In general, short-term impacts are those that would occur only with respect to a particular activity or for a finite period. Long-term impacts are those that are more likely to be persistent and chronic.

- Minor, moderate, or major impacts. These relative terms are used to characterize the magnitude of an impact. Minor impacts are generally those that might be perceptible but, in their context, are not amenable to measurement because of their relatively minor character. Moderate impacts are those that are more perceptible and, typically, more amenable to quantification or measurement. Major impacts are those that, in their context and due to their intensity (severity), have the potential to be significant and, thus, warrant heightened attention and examination for potential means for mitigation to fulfill the requirements of NEPA.
- Adverse or beneficial impacts. An adverse impact is one having unfavorable, or undesirable outcomes on the man-made or natural environment. A beneficial impact is one having positive outcomes on the man-made or natural environment. A single act might result in adverse impacts on one environmental resource and beneficial impacts on another resource.
- Cumulative impacts. Cumulative impacts are impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time within a geographic area.

In addition to NEPA, NOAA Fisheries must comply with other Federal statutes and requirements such as the Magnuson-Stevens Act, Executive Order 12866, and the Regulatory Flexibility Act. This document comprehensively analyzes the alternatives considered for all these requirements. Thus, Sections 3 and 4 provide a summary of all the economic analyses and associated data. Section 6 meets the requirements under Executive Order 12866 in relation to regulatory planning and review, and Section 7 provides the Initial Regulatory Flexibility Analysis required under the Regulatory Flexibility Act. Sections 8 and 9 provide additional information that is required under various statutes. While some of the sections were written in a way to comply with the specific requirements under these various statutes and requirements, it is the document as a whole that meets these requirements and not any individual section.

2.0 SUMMARY OF THE ALTERNATIVES

NEPA requires that any Federal agency proposing a major Federal action consider all reasonable alternatives, in addition to the proposed action. The evaluation of alternatives in an EA may assist NOAA Fisheries in ensuring that any unnecessary impacts are avoided through an assessment of alternative ways to achieve the underlying purpose of the project that may result in less environmental harm.

To warrant detailed evaluation, an alternative must be reasonable and meet the purpose and need of the action (see Section 1). Screening criteria are used to determine whether an alternative is reasonable. The following discussion identifies the screening criteria used in this EA to evaluate whether an alternative is reasonable; evaluates various alternatives against the screening criteria (including the proposed measures) and identifies those alternatives found to be reasonable; identifies those alternatives found not to be reasonable; and for the latter, provides the basis for this finding. Alternatives considered but found not to be reasonable are not evaluated in detail in this EA.

Screening Criteria– To be considered "reasonable" for purposes of this EA, an alternative must meet the following criteria:

- An alternative must be consistent with 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 other laws (e.g., ESA, MMPA, etc.).
- An alternative must be consistent with the 2006 Consolidated Atlantic HMS FMP and its amendments.
- An alternative must be consistent with ICCAT recommendations as implemented by NOAA Fisheries under ATCA.

This section considers a reasonable range of alternatives that can accomplish the purpose and need of the proposed action described in Section 1. These alternatives are listed below. Since the purpose of this action is to implement the 2021 ICCAT recommendations for bluefin tuna and northern albacore, the alternatives described below would implement the quotas and MP adopted in those recommendations, compared to the No Action alternatives. The environmental, economic, and social impacts of these alternatives are discussed in later sections.

2.1 Bluefin Tuna Alternatives

Alternative A1: No Action

Under this alternative, NOAA Fisheries would maintain the U.S. baseline quota of 1,247.86 mt and would not implement the new quota adopted by ICCAT in 2021. As a result, the domestic fishing subquotas established in the 2018 quota rule (83 FR 51391, October 11, 2018) would remain the same. This existing baseline quota as well as the domestic fishing subquotas serve as baseline conditions for comparison and analytical purposes with the preferred alternative.

NOAA Fisheries would continue to implement the 2017 ICCAT-recommended limit on the harvest of school bluefin tuna (measuring 27 to less than 47 inches curved fork length) as appropriate to not exceed 127.3 mt, in accordance with Recommendation 17-06. NOAA Fisheries would continue to adjust the U.S. annual bluefin tuna quota for the previous year's underharvest, if any, under the regulations adopted in Amendment 7, as described in Section 1.2, and consistent with Recommendation 17-06.

Alternative A2: Implement U.S. bluefin tuna quota and distribute to domestic categories in accordance with the 2021 ICCAT Recommendation and currently codified quota regulations (Preferred Alternative)

Under this alternative, NOAA Fisheries would implement the baseline annual U.S. bluefin tuna of 1,316.14 mt, reflecting adoption of the new quota at ICCAT in Recommendation 21-07. NOAA Fisheries would distribute the quota among domestic quota categories using the current

regulatory formula and would modify the codified subquotas accordingly.

NOAA Fisheries would implement the ICCAT-recommended limit on the harvest of school bluefin tuna (measuring 27 to less than 47 inches curved fork length) as appropriate to not exceed 134.1 mt, in accordance with Recommendation 21-07. NOAA Fisheries would continue to adjust the U.S. annual bluefin tuna quota for the previous year's underharvest, if any, under the regulations adopted in Amendment 7, as described in Section 1.2, and consistent with Recommendation 17-06.

Current regulations set out the formula for distribution of U.S. quota among domestic quota categories (subquotas). First, 68 mt is subtracted from the annual U.S. baseline bluefin tuna quota and allocated to the Longline category quota. Second, the remaining quota is divided among the categories according to the following percentages: General—47.1 percent; Angling—19.7 percent; Harpoon—3.9 percent; Purse Seine—18.6 percent; Longline—8.1 percent (plus the 68-mt initial allocation); Trap—0.1 percent; and Reserve—2.5 percent. Table 1 shows the baseline category allocations that would result from implementation of Alternatives A1 and A2. Table 1 compares the *baseline* annual quota and subquotas only and does not reflect any adjustments to the subquotas such as inseason transfers or the annual quota reallocation process (for the Purse Seine and Reserve category quotas) adopted in Amendment 7 and codified in the regulations. These adjustments to subquotas would occur within the ICCAT-recommended overall U.S. bluefin tuna quota after considering the determination criteria at § 635.27(a)(8), including the effects of the adjustment on bluefin tuna rebuilding and overfishing, and these adjustments are not analyzed further in this EA.

Table 1 Comparison of the baseline bluefin tuna quotas and subquotas under the analyzed alternatives (in metric tons)

	Alternative A1 (No Action)	Alternative A2
ICCAT Recommendation	17-06 (TAC=2,350 mt)	21-07 (TAC=2,726 mt)
	mt	mt
Baseline Annual U.S. quota	1,247.86	1,316.14
Suballocations:		
General category	555.7	587.9
Harpoon category	46.0	48.7
Longline category	163.6	169.1
Trap category	1.2	1.2
Purse Seine category	219.5	232.2
Angling category	232.4	245.9
Reserve category	29.5	31.2
Northeast Distant gear restricted area (NED) set-aside (for use by Longline category)	25	25
Annual Total U.S. quota	1,272.86	1341.14

For bluefin tuna, the baseline annual quota and subquotas would be effective for the 2022 fishing year and annually until changed (for instance, as a result of a new ICCAT bluefin tuna TAC and U.S. quota recommendation). As described in Section 1, NOAA Fisheries may make subsequent quota transfers, such as from one category (including the Reserve category) to another within the fishing year pursuant to regulatory determination criteria. Table 2 shows the baseline category quotas and subquotas that would result from implementation of Alternative A2.

Table 2 Annual bluefin tuna quotas (in metric tons)

Category	Annual Baseline Quota	Subquotas	Subquota Amounts
General	587.9		
		January-March[1]	31.2
		June-August	293.9
		September	155.8
		October-November	76.4
		December	30.6
Harpoon	48.7		
Longline	169.1		
Trap	1.2		
Purse Seine	232.2		
Angling	245.9		
		School	134.1
		Reserve	24.8
		North of 39°18′ N. lat.	51.6
		South of 39°18′ N. lat.	57.7
		Large School/Small Medium	106.1
		North of 39°18′ N. lat.	50.1
		South of 39°18′ N. lat.	56.0
		Trophy	5.7
		North of 39°18′ N. lat.	1.9
		South of 39°18′ N. lat.	1.9
		Gulf of Mexico	1.9
Reserve	31.2		
U.S. Baseline Quota	**1,316.14**[2]		
Total U.S. Quota, including 25 mt for NED (Longline)	**1,341.14**[2]		

[1] January 1 through the effective date of a closure notice filed by NOAA Fisheries announcing that the January subquota is reached or projected to be reached, or through March 31, whichever comes first.

[2] Totals subject to rounding error.

2.2 Northern Albacore Alternatives

Alternative B1: No Action

Under this alternative, NOAA Fisheries would maintain the codified baseline annual U.S. northern albacore quota of 632.4 mt and not implement the latest ICCAT recommendation's allocation to the United States. The existing baseline quota of 632.4 mt also serves as the baseline for comparison and analytical purposes with alternatives B2 and B3. NOAA Fisheries would continue to adjust the U.S. annual northern albacore quota for the previous year's underharvest, if any, as allowable under the regulations adopted in Amendment 7, as described in Section 1.2.

Alternative B2: Implement U.S. quota in accordance with the 2021 ICCAT Recommendation and currently codified quota regulations

Under this alternative, NOAA Fisheries would implement the new baseline annual U.S. northern albacore quota of 711.5 mt in ICCAT Recommendation 21-04. The baseline quota for the 2022 fishing year would be 711.5 mt and remain at that level annually unless changed, for instance as a result of a new ICCAT northern albacore TAC and U.S. quota recommendation, in which case additional effects analyses may need to be undertaken. NOAA Fisheries would continue to adjust the U.S. annual northern albacore quota for the previous year's underharvest, if any, under the regulations adopted in Amendment 7, as described in Section 1.2, and consistent with Recommendation 21-04.

Alternative B3: Implement U.S. baseline quota in accordance with the ICCAT-adopted quotas, analyzing a maximum possible quota pursuant to the northern albacore MP. (Preferred Alternative)

This alternative would implement the quota of 711.5 mt for 2022 and 2023 and would allow for streamlined implementation of future three-year quotas of up to 950 mt, when adopted by ICCAT consistent with the MP in Recommendation 21-04 and when no new circumstances are present or management measures introduced that require additional analysis or opportunity for comment.

Under this alternative, NOAA Fisheries would implement the ICCAT-adopted TAC of 711.5 mt and analyze a maximum quota of up to 950 mt where adopted by ICCAT through application of the MP established in Annex 1 and Annex 3 of Recommendation 21-04. Applying the MP procedures, ICCAT set a constant annual TAC of 37,801 mt for the management period 2022-2023, with a quota of 711.5 mt allocated to the United States. While this quota provision is for two years, the management period effectively covers three years as a continuation of the TAC set for 2021 in Recommendation 20-04. Under the terms of the MP, annual TACs and quotas may fluctuate consistent with the MP parameters, although "the maximum catch limit recommended is 50,000 mt in order to avoid adverse effects of potentially inaccurate stock assessments." This alternative would consider future changes to the three-year annual U.S. quota for northern albacore adopted pursuant to the MP. Assuming the portion provided to the United States under future ICCAT recommendations remains the same, such an increase would result in a maximum baseline U.S. quota of 950 mt. NOAA Fisheries would continue to annually adjust the baseline northern albacore quota for over- and

underharvests as appropriate through notice in the *Federal Register*. The NEPA analyses in this document would support future quota changes up to the maximum analyzed quota consistent with the current MP, where no new management measures are adopted or and environmental conditions or relevant circumstances have not changed.

Under the MP, the maximum allowable increase in the TAC from one management period to the next is 25 percent, up to the maximum of 50,000 mt. As such, the baseline annual quota would not be expected to increase any more than 25 percent from one year to the next. For example, in 2024, if the TAC is increased by 25 percent, the U.S. quota could increase from 711.5 mt to 889.4 mt. Under this alternative, at no time would the U.S. baseline annual quota exceed 950 mt.

The baseline quota would remain at 711.5 mt annually until changed (e.g., by ICCAT under the MP in a new recommendation).

3.0 AFFECTED ENVIRONMENT

This section includes a brief summary of the status of the stocks, fishery participants, and gear types that are involved in this rulemaking and focuses on information that has been updated since the publication of the 2018 bluefin tuna and northern albacore quota rule. Chapter 3 (pages 14-20) of the 2018 quota rule EA included a description of the biology of bluefin tuna and the U.S. tuna fisheries, fishery participants, gear types, and affected area including habitat as of December 2017, and is incorporated here by reference. That information remains relevant for this proposed action. Chapter 3 of the 2018 quota rule also addressed the status of bluefin tuna. This section updates that information with relevant stock assessment information since 2018.

The action area is the Atlantic Ocean, Gulf of Mexico, and Caribbean Sea. For a complete description of the biology and status of bluefin tuna and the U.S. tuna fisheries, including operations, catches, and discards, please see Section 3.2 of the Amendment 7 FEIS (NOAA Fisheries, 2014; pages 113-124), the 2021 SCRS Bluefin Tuna Stock Assessment (SCRS 2021), and the 2021 HMS Stock Assessment and Fishery Evaluation (SAFE) Report (NOAA Fisheries, 2022). Also, for information on protected species and the Atlantic tuna fisheries, including regulatory requirements and bycatch reduction measures, please see Section 6 of the 2021 HMS SAFE Report. These documents or sections of documents are hereby incorporated by reference, and summaries of their contents are included below.

3.1 Status of the Bluefin Tuna Stock

The results of the 2017 and prior western Atlantic bluefin tuna stock assessments are described in Chapter 3 of the 2018 quota rule EA. The results of the 2020 stock assessment update for western Atlantic bluefin tuna are described in the Supplemental EA for the rule to adjust the 2021 northern albacore, swordfish, and bluefin tuna Reserve category quotas (86 FR 54659, October 4, 2021; EA Section 4, pages 10-13), incorporated here by reference.

The SCRS conducted a western Atlantic bluefin tuna stock assessment in 2021 (SCRS 2021). This assessment used data through 2020 and updated the modeling assumptions given scientific concerns expressed by the SCRS regarding the 2020 assessment update. The 2021 assessment results were more positive than in 2020 as detailed below.

Due to continued uncertainty regarding stock recruitment potential and the SCRS' continued inability to resolve the divergent (i.e., low vs. high) recruitment potential scenarios, the SCRS did not estimate spawning stock biomass (SSB) or determine stock status based on maximum sustainable yield (MSY) reference points. Rather than presenting two SSB series based on these two scenarios, the SCRS presented total biomass information to assess the stock, which does not depend on which of these scenarios is selected. The 2021 stock assessment estimated that the total biomass increased by nine percent over 2017 through 2020. In the 2021 assessment, the SCRS also concluded that overfishing was not occurring. In recent years, the SCRS has focused on giving short-term advice based on an $F_{0.1}$ reference point (taken to be a proxy for F_{MSY}) assuming that near term recruitment will be similar to the recent past recruitment. The $F_{0.1}$ strategy compensates for the effect of recruitment changes on biomass by allowing higher catches when recent recruitment is higher and reducing catches when recent recruitments are lower. Fishing consistently at $F_{0.1}$ will, over the long-term, cause the stock to fluctuate around the corresponding long-term biomass ($B_{0.1}$), whatever the future recruitment potential. The 2021 report indicates that the TAC in place for 2018 through 2021 likely did not lead to overfishing relative to $F_{0.1}$, and that the stock showed clear signs of several strong subsequent recruitment years. Domestically, following the 2017 stock assessment, NOAA Fisheries determined that the overfished status for bluefin tuna is unknown and that the stock is not subject to overfishing, and this status remains in effect.

Recognizing that the results of the 2021 stock assessment and projections, including the Kobe matrix,[3] do not capture the full degree of uncertainty with regard to the spawner-recruit relationship, the effects of stock mixing, and other aspects of the assessment and projections, the SCRS recommended that managers should use the scientific advice with caution. Toward that end, the SCRS recommended that a moderate increase to the TAC was allowable and provided additional advice on alternative approaches to assist in determining the level of a moderate increase in TAC, specifically the empirical approach looking at both western area and western spawning stock abundance (which would result in 4-percent and 16-percent increases, respectively), and the MSE approach (which would result in a 28 percent increase). Considering this advice, ICCAT adopted a TAC of 2,726 mt at its November 2021 meeting (Recommendation 21-07), which is a 16-percent increase from the prior TAC of 2,350 mt. The recommendation describes the adopted TAC as a precautionary TAC that prevents overfishing with a high probability, prioritizes continued stock growth, including into the long-term, and ensures relative stability by avoiding a large fluctuation in catches.

[3] The Kobe matrix is a data table that the SCRS provides fisheries managers with the statistical probability of meeting management targets, including ending overfishing and rebuilding overfished stocks, in a standardized manner as a result of potential management actions such as TAC.

3.2 Status of the Northern Albacore Stock

The results of the 2016 northern albacore stock assessment and 2017 MSE and HCR work are described in Chapter 3 of the 2018 quota rule EA. Since 2017, ICCAT received a positive external review of the MSE, indicating that MSE simulations conducted in 2017 and subsequent years allow the SCRS to provide robust advice for management of the northern albacore stock. Under the MSE, the SCRS is able to address a wide range of uncertainties and meet the objectives for the northern albacore stock to be in the green quadrant of the Kobe plot[4] with a probability higher than 60 percent.

In 2020, the SCRS conducted a stock assessment using a production model and data through 2018 (SCRS 2020). The stock assessment concluded that the relative abundance of northern albacore has continued to increase over the last years and that the probability of the stock being in the green quadrant of the Kobe plot (not overfished ($B>B_{MSY}$) and not undergoing overfishing ($F<F_{MSY}$)) is 98.4 percent. Considering that no "exceptional circumstances" have been detected (in brief, when reality clearly diverges from what was simulated in the MSE analysis and application of the HCR may not be appropriate), the SCRS determined that the Commission could apply the HCR to the 2020 stock assessment biomass estimates to set the next TAC for the 2021-2023 period. The TAC obtained by applying the interim HCR was 37,801 mt, which represented a 12.5-percent increase from 2018-2020 and was above the MSY estimate for the stock (36,816 t). However, the biomass estimated by the 2020 assessment was considered to be well above B_{MSY} and the SCRS advised, therefore, that this level of catch could be sustained in the near-term. The 37,801-mt TAC derived from the HCR was adopted by ICCAT in 2020 for 2021. The 2020 recommendation called on ICCAT to review the interim HCR in 2021 with a view to adopting a long-term MP at that point. In 2021, ICCAT adopted Recommendation 21-04, which established an MP containing the HCR and maintained the TAC of 37,801 mt for 2022 and 2023.

3.3 Description of the Fishery

There are over 30,000 permitted vessels that may participate in the Atlantic tunas fisheries, although not all permitted vessels are active. Vessel permits are issued in five directed quota categories and two incidental quota categories (Table 3). A complete description of participation rates in the bluefin tuna and northern albacore fisheries is provided in Chapter 5 of Amendment 7 and Chapter 4 of 2021 HMS SAFE Report and is not repeated here. Generally, permits are issued for a distinct fishery by gear types. Participants are restricted to the use of only those gears allowed under the vessel's permit. For directed bluefin tuna fisheries, these gears consist of purse seine, rod and reel, harpoon, handline, bandit gear, and green-stick (which is used primarily to harvest yellowfin tuna) under Harpoon, Purse Seine, and General category permits and recreational permits. Pelagic longline

[4] The Kobe plot shows the trajectory of a fished stock over time, with abundance is on the horizontal axis and fishing mortality on the vertical axis. These are often shown relative to B_{MSY} and to F_{MSY}, respectively. A Kobe plot is often divided into four quadrants by a vertical line at $B=B_{MSY}$ and a horizontal line at $F=F_{MSY}$. Generally, if the model results are in the green portion of the figure (lower right), the stock may have a status of "not overfished" and "overfishing is not occurring." Similarly, model results in the yellow portions of the figure (lower left and upper right) are not desirable, generally representing a stock with a status of "overfished" or "overfishing is occurring" and results in the red portion (upper left) represent a stock that is both "overfished" and for which "overfishing is occurring."

gear is not an allowed gear type for directed fishing on bluefin tuna; it is used to target other HMS species, primarily swordfish and bigeye and yellowfin tuna, during which incidental catch of bluefin tuna occurs. Thus, pelagic longline is considered an incidental gear type for bluefin tuna. NOAA Fisheries also allocates a quota for landings of incidentally-caught bluefin tuna by trap gear. See Section 3.3 of the Amendment 7 FEIS for thorough descriptions of the bluefin tuna fisheries by quota category and gear type. Directed fishing gears for northern albacore are the same as for bluefin tuna but also include speargun for recreational fishing. Pelagic longline gear is authorized for directed fishing for northern albacore.

Table 3 2021 Atlantic HMS and Atlantic tunas permits as of October 2021.

Category	**Number of Permits**
General	2,730
Harpoon	35
Purse Seine	No active vessels
Longline	284
Trap	2
HMS Angling (Recreational)	23,632
HMS Charter/Headboat	4,055
Total	30,736

Data Source: Atlantic HMS/Tunas Permit Database, as reported in 2021 HMS SAFE Report

U.S. landings of bluefin tuna for 2016 through 2020 are provided in Table 4. The historical level of landings has generally been determined by quotas since 1982 (i.e., landings have been higher when the quota is higher). Generally, commercial fisheries are focused on large medium (73 inches to less than 81 inches) and giant (81 inches or greater) bluefin tuna, while recreational fisheries are focused on large school/small medium bluefin tuna (47 inches to less than 73 inches), with allowances for school (27 inches to less than 47 inches), large medium, and giant bluefin tuna. Commercial categories are monitored through mandatory reporting, whereas the recreational catch is monitored primarily by survey, although the states of Maryland and North Carolina have implemented mandatory recreational census bluefin tuna tagging programs as well.

Table 4 U.S. Landings (mt ww) of Atlantic bluefin tuna by area and gear in 2016–2020.

Area	Gear	2016	2017	2018	2019	2020
Northwest Atlantic	Longline *	82.4	70.8	91.4	77.4	51.2
	Handline	1.1	5.0	1.4	0	0
	Purse seine	0	0	0	0	0
	Trap	0	0	0	0	0.8
	Harpoon	52.9	81.7	43.6	118.2	85.0
	Commercial rod and reel	722.1	652.8	765.7	798.6	848.8
	Recreational rod and reel	143.7	140.1	112.5	179.9	192.6
Gulf of Mexico	Longline	10.7	11.7	8.0	4.5	4.8
	Recreational rod and reel	1.7	1.7	1.6	1.9	0
North Central Atlantic**	Longline	12.0	32.9	4.0	9.8	0.2
Caribbean	Longline	0.2	0	0	0.4	0.4
All areas	All gears	1,026.8	996.8	1,028.3	1,190.8	1,183.5

mt ww = Metric tons whole weight.
*Includes landings and estimated discards from scientific observer and logbook sampling programs.
**Referenced as "NCA Area 94a" in the ICCAT report.
Source: 2021 HMS SAFE Report.

NOAA Fisheries does not further distribute the U.S. northern albacore quota among subquotas. Landings for 2016 through 2020 are presented by gear in Table 5.

Table 5 Northern albacore landings, by area and gear (2016-2020).

Area	Gear	2016	2017	2018	2019	2020
NW Atlantic	Longline	59.9	94.0	44.9	113.2	188.8
	Gillnet	3.3	0.2	0.5	0.3	2.0
	Handline	0.7	0.1	0.2	0.5	0.8
	Trawl	0.5	1.7	<0.1	1.1	0.3
	Troll	<0.1	0	0	0	<0.1
	Rod and reel	41.4	27.5	8.9	29.5	45.0
	Unclassified	0	0	0	0	<0.1
Gulf of Mexico and Caribbean	Longline	143.1	114.7	48.0	76.6	95.6
	Rod and reel	1.2	0	0	0	0
	Handline	0.1	0	0	0	0
All areas	All gears	250.2	238.3	102.6	221.1	332.6

Source: 2021 HMS SAFE Report.

Prices, Markets, and Ex-Vessel Revenues

Since implementation of the 1999 FMP, the ex-vessel average price per pound of bluefin tuna (round weight) has ranged from a low in 2003 of $4.75 to a high of just under $9 in 2012. Since 2012, the ex-vessel average price per pound has generally decreased and was most recently $5.08 in 2020. The role of the Japanese market and of quality and market structure considerations in the determination of bluefin tuna prices is discussed in great detail in Sections 3.5 and 3.7 of the 2006 Consolidated HMS FMP and is not repeated here. Many factors, including the yen/dollar exchange rate, market supply and demand, and fish quality may affect ex-vessel prices. In addition, the amount of product from the Mediterranean bluefin tuna farming industry can influence prices, with over-supply of the market potentially leading to reduced ex-vessel prices for U.S. fishermen. Table 6 gives the annual average ex-vessel price of bluefin tuna for 2016 through 2020. Table 7 gives the annual average ex-vessel price of northern albacore for 2016 through 2020.

Table 6 Ex-vessel average price (per lb, round weight), annual landing weight, and total revenue for bluefin tuna

Values	2016	2017	2018	2019	2020
Ex-vessel*	$7.23	$6.45	$6.99	$5.63	$5.08
Weight**	1,522,634	1,490,321	1,587,794	1,742,863	1,734,230
Fishery revenue	$11,008,644	$9,581,816	$11,010,617	$9,787,551	$8,415,905

Source: 2021 HMS SAFE Report.
*Dollars per pound dressed weight.
**Pounds dressed weight.

Table 7 Ex-vessel average price (per lb, round weight), annual landing weight, and total revenue for northern albacore

Values	2016	2017	2018	2019	2020
Ex-vessel*	$1.56	$1.63	$1.98	$1.76	$1.57
Weight**	373,792	364,723	164,483	334,002	522,062
Fishery revenue	$563,784	$652,948	$335,570	$571,281	$967,736

Source: 2021 HMS SAFE Report.
*Dollars per pound dressed weight.
**Pounds dressed weight.

Ex-vessel gross revenues (nominal values) from recorded sales of bluefin tuna and northern albacore are presented in Table 6 and Table 7, respectively. Bluefin tuna revenues were 24 percent lower in 2020 than in 2016. Northern albacore revenues were 72 percent higher in 2020 than in 2016. While landings, and therefore total ex-vessel gross revenues, were higher in 2020 than in other years, in all years the full quota was not harvested. Note that this discussion focuses on gross revenues only, and not net revenues.

Processing and Export

Section 3.7 of the 2006 Consolidated HMS FMP and Section 8.4 of the 2021 HMS SAFE Report include detailed discussion of the export, import, and re-export trade program and market for bluefin tuna, and that information is not repeated here.

3.4 Endangered Species Act and Marine Mammal Protection Act

The ESA is the primary Federal legislation governing interactions between fisheries and species listed as threatened or endangered under the ESA 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, NOAA Fisheries Office of Sustainable Fisheries consults with the Office of Protected Resources to determine what impacts fishery management actions could have on threatened or endangered marine species and what actions can be taken to reduce or eliminate negative impacts. 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 NOAA Fisheries. At the conclusion of formal consultation, NOAA Fisheries issues a biological opinion (BiOp), which analyzes the effects of the action. If NOAA Fisheries concludes the action will jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat, NOAA Fisheries specifies Reasonable and Prudent Alternatives to the proposed action. If NOAA Fisheries concludes the action will not jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat, NOAA Fisheries specifies required Reasonable and Prudent Measures and Terms and Conditions, to mitigate the effects of the action, and may authorize any allowable “incidental take” of the species.

In May 2020, NOAA Fisheries issued a BiOp for all Atlantic HMS fisheries except the pelagic longline fishery and a BiOp for the Atlantic HMS pelagic longline fishery, which both state that the continued operation of HMS fisheries is not likely to jeopardize the continued existence of ESA-listed species including sea turtles, sawfish, Atlantic sturgeon, scalloped hammerhead shark (Central and Southwest Atlantic Distinct Population Segment), oceanic whitetip shark, and giant manta ray. NOAA Fisheries is implementing the Reasonable and Prudent Measures and Terms and Conditions of the two 2020 BiOps. This proposed 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. Any of the covered ESA-listed species taken would be considered against the Incidental Take Statement in both 2020 BiOps for all Atlantic HMS fisheries, as long as the operations are consistent with the Reasonable and Prudent Measures in that BiOp.

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 U.S. Under MMPA requirements, NOAA Fisheries produces an annual List of Fisheries that classifies domestic commercial fisheries, by gear type, relative to their rates of incidental mortality or serious injury of marine mammals. The List of Fisheries includes three

classifications:

- Category I fisheries are those with frequent serious injury or mortality to marine mammals;
- Category II fisheries are those with occasional serious injury or mortality; and
- Category III fisheries are those with remote likelihood of serious injury or mortality to marine mammals.

Fishermen participating in Category I or II fisheries are required to be registered under the MMPA and, if selected, to accommodate an observer aboard their vessels. Vessel owners or operators, or fishermen, in Category I, II, or III fisheries must report all incidental mortalities and injuries of marine mammals during the course of commercial fishing operations to NOAA Fisheries. NOAA Fisheries does require reporting by charter/headboat fishermen, and no takes in Atlantic HMS charter/headboat fisheries have been reported to NOAA Fisheries to date.

The MMPA regulations apply to fisheries including the Gulf of Maine and Mid-Atlantic tuna, shark and swordfish hook-and-line fishery, Southeast Mid-Atlantic and Gulf of Mexico shark bottom longline fisheries, Mid-Atlantic, southeastern Atlantic, and Gulf of Mexico pelagic hook-and-line fisheries, and lastly the commercial passenger fishing vessel (charter/headboat) fisheries. All of these fisheries are listed as Category III fisheries in the MMPA Classifications of Commercial Atlantic HMS Fisheries. Through regulations, these types of fishing gear are not likely to result in mortality or serious injury of marine mammals.

Please refer to Sections 3.8 and 3.9.9 of the 2006 Consolidated HMS FMP and Chapter 6 of the 2021 HMS SAFE Report for additional information on the protected species and marine mammals in the area of Atlantic HMS fisheries.

4.0 ENVIRONMENTAL CONSEQUENCES OF ALTERNATIVES

This section considers and describes potential impacts of each of the considered alternatives. The alternatives preferred by NOAA Fisheries are identified below along with the justification for this preference. The economic impacts of each alternative are briefly summarized in the following sections, and are described more fully in Sections 6 (RIR) and 7 (IRFA).

4.1 Ecological Evaluation

Bluefin Tuna Quota Alternatives

As discussed in Section 3.1 of the Amendment 7 FEIS and final rule, NOAA Fisheries implements the U.S. quota recommended by ICCAT, consistent with ATCA, and further divides the quota among U.S. quota categories in accordance with an established subquota category allocation formula that was codified through earlier rulemaking.

Under Alternative A1, the No Action alternative, NOAA Fisheries would not implement the 2021 ICCAT bluefin tuna quota recommendation (Recommendation 21-07) and would instead

continue to implement the annual baseline U.S. quota that has been in effect annually from 2018 through 2021, consistent with the 2017 ICCAT recommendation, with subquotas set per the codified subquota regulations.

Alternative A1 would be inconsistent with the 2021 ICCAT recommendation and provisions of ATCA, because it would implement a quota different than that recently adopted by ICCAT. Thus, it would not meet the purpose for the action, which is, in part, to implement the new ICCAT recommendation for western Atlantic bluefin tuna. The U.S. quota for 2022 and subsequent years would be based on the level of quota under the 2017 ICCAT recommendation (i.e., a baseline quota of 1,247.86 mt, which is approximately 68.28 mt (5 percent) lower than the level currently adopted). The SCRS advised that the TAC in place from 2018 through 2021 likely did not lead to overfishing relative to $F_{0.1}$ and that the stock showed clear signs of several strong subsequent recruitment years. Under this alternative, the U.S. quota would remain at the level that was based on the previously-recommended ICCAT TAC level of 2,350 mt. As in previous years, we anticipate that the United States would not harvest its entire quota. Because the fisheries would be authorized to catch that much quota, however, we are presuming catch of the full quota for purposes of analysis here.

It should be noted, however, that other Contracting Parties fishing on the stock would be implementing their allocations of the ICCAT-recommended TAC of 2,726 mt in Recommendation 21-07. Thus, under this alternative, the effective overall TAC for the stock would be 68.28 mt less than that authorized by ICCAT, or 2,657.72 mt. According to the most recent stock assessment, this level of catch is expected not to lead to overfishing relative to $F_{0.1}$ or decrease stock biomass. Presuming that the United States were to catch all 1,247.86 mt, primarily by commercial and recreational rod and reel gear in the Northwest Atlantic, as shown in Table 4, and that, in combination with other Contracting Parties, the full 2,657.72 mt were caught, this could be expected to have short- and long-term, minor, neutral to beneficial ecological impacts on bluefin tuna.

Regarding the ICCAT-recommended 10-percent limit on school bluefin tuna, NOAA Fisheries expects that harvesting 127.3 mt of school bluefin tuna per year (i.e., 10 percent of the total U.S. bluefin tuna quota) would result in neutral impacts to the stock. Because several bluefin tuna year classes contribute to the SSB, continuing to harvest approximately 5 percent (i.e., 127.3 mt/2,726 mt) of the total expected annual mortality as school bluefin tuna should not result in negative impacts. NOAA Fisheries would continue to implement the ICCAT-recommended limit on the harvest of school bluefin tuna (measuring 27 to less than 47 inches curved fork length) as appropriate to not exceed 127.3 mt (consistent with Recommendation 17-06). Compliance by other nations harvesting the bluefin tuna stock under the ICCAT recommendation would also influence overall stock conditions. There would be no new impacts to other species beyond those that occur under the status quo because this alternative would not significantly alter existing fishing patterns or effort, and environmental conditions have not changed in a way that would result in new impacts.

Alternative A1 also would maintain the status quo by allocating 25 mt for bycatch of bluefin tuna associated with pelagic longline fishing in the NED, as specified first in the 2014 ICCAT recommendation (Recommendation 14-05) and then in each subsequent bluefin tuna management recommendation. Continuing this 25-mt allocation would not result in impacts beyond those that

occur under the status quo to bluefin tuna or to other species, as this alternative would not alter existing fishing patterns or effort of pelagic longline vessels and environmental conditions have not changed in a way that would result in new impacts. NOAA Fisheries would monitor and manage the pelagic longline fishery in this area, and account for the 25 mt, in concert with the reporting and monitoring mechanisms that are already in place.

Alternative A1 also would maintain the status quo by allowing carryforward of the previous year's bluefin tuna quota underharvest, up to 10 percent of the baseline quota, as specified first in Recommendation 08-04 for implementation in 2011, and currently specified under Recommendation 17-06. Carryforward of 10 percent of the baseline quota, i.e., increasing the U.S. bluefin tuna quota by 10 percent (or less than 5 percent of the TAC), would not be expected to have any additional ecological impacts on bluefin tuna beyond those described for implementation of the baseline quota, as the carryforward provisions are accounted for in the SCRS's evaluation of the effect of current regulations and management advice using the current stock assessment. Specifically, the SCRS stated that the 2021 assessment estimated that the biomass has increased by nine percent over the time period 2017-2020, when these provisions of Recommendation 17-06 were in place.

Overall, Alternative A1 would have short- and long-term, minor, neutral to beneficial ecological impacts on bluefin tuna.

Alternative A2, the preferred alternative, would be consistent with the 2021 ICCAT Recommendation (Recommendation 21-07), including a TAC that is within the SCRS-recommended range and SCRS-recommended approaches to setting a TAC in the 2021 stock assessment for bluefin tuna. The implementation of the quota within this range could be expected to result in short-term, neutral to minor beneficial impacts to the western Atlantic bluefin tuna stock. The adopted TAC follows the scientific advice of the SCRS for management in 2022 under the interim conservation and management plan and is identified as a precautionary TAC, based on the results of the 2021 stock assessment, that prevents overfishing with a high probability, prioritizes continued stock growth, including into the long-term, and ensures relative stability by avoiding a large fluctuation in catches. Since the quota under Alternative A2 would be based on this precautionary TAC, ecological impacts would be neutral to minor beneficial. Furthermore, U.S. landings have been below the quota for a number of years and an increase in the quota is unlikely to result in increased fishing effort or mortality. The ICCAT recommendation provides that the annual TAC shall be reviewed again at the ICCAT meeting in 2022. Such a review would include consideration of any additional SCRS advice and compliance by harvesting nations. Furthermore, the ICCAT recommendation provides that "[i]f the SCRS detects a serious threat of stock collapse, the Commission shall suspend all bluefin tuna fisheries in the western Atlantic for the following year." Thus, it is possible that ICCAT will adopt a new stock management recommendation with a new resulting U.S. bluefin tuna quota for 2023. However, under this alternative, the U.S. quota would remain at 1,316.14 mt until modified.

NOAA Fisheries would continue to monitor landings and apply controls as needed inseason (e.g., adjustments to daily retention limits, fishery closures) to manage the fisheries such that the ICCAT-recommended U.S. quota and limit on school bluefin tuna is not exceeded. NOAA Fisheries expects that harvesting 134.1 mt of school bluefin tuna per year would result in neutral impacts to the

stock. The 134.1 mt annual limit of school bluefin tuna is required under Recommendation 17-06 and is based on SCRS scientific advice. ICCAT did not alter this requirement following the 2021 stock assessment and the proportion of the TAC that can be harvested remains the same. Because several bluefin tuna year classes contribute to the spawning stock biomass, harvesting approximately 5 percent (i.e., 134.1 mt/2,726 mt) of the total expected annual mortality as school bluefin tuna should not be expected to result in negative impacts.

As in Alternative A1, Alternative A2 also would allocate 25 mt for bycatch of bluefin tuna associated with pelagic longline fishing in the NED. Continuing this 25-mt allocation would not result in new impacts beyond those that occur under the status quo since there would be no change to the NED-specific bycatch limit. As noted above, the 25-mt allocation was specified first in the 2014 ICCAT recommendation (Recommendation 14-05) and then in each subsequent bluefin tuna management recommendation, and no changes were made by ICCAT to this requirement following the 2021 stock assessment. NOAA Fisheries would monitor and manage the pelagic longline fishery in this area, and account for the 25 mt, in concert with the reporting and monitoring mechanisms that are already in place.

As in Alternative A1, Alternative A2 would maintain the status quo by allowing carryforward of the previous year's bluefin tuna quota underharvest, up to 10 percent of the baseline quota. Carryforward of 10 percent of the baseline quota, i.e., increasing the new U.S. bluefin tuna quota under this alternative by 10 percent (or approximately 5 percent of the TAC), would not be expected to have any additional ecological impacts on bluefin tuna beyond those described for implementation of the baseline quota, as the carryforward provisions are accounted for in the SCRS's evaluation of the effect of current regulations and management advice using the current stock assessment. Specifically, the SCRS stated that the 2021 assessment estimated that the biomass has increased by nine percent over the time period 2017-2020, when these provisions of Recommendation 17-06 were in place, and that the catch level under the current recommendation is expected not to lead to overfishing relative to $F_{0.1}$ or decrease stock biomass.

Overall, implementing Alternative A2 would have short- and long-term, minor, neutral to beneficial ecological impacts on bluefin tuna.

Northern Albacore Quota Alternatives

Under Alternative B1, the No Action alternative, NOAA Fisheries would not implement the 2021 ICCAT northern albacore quota recommendation and would instead implement the annual baseline U.S. quota that was implemented in 2018. Alternative B1 would be inconsistent with ICCAT Recommendation 21-04 and provisions of ATCA, because it would implement a quota different than that recently recommended by ICCAT. Thus, it would not meet the purpose for the action (i.e., to implement the new ICCAT recommendation concerning northern albacore), but is included and analyzed here for comparison purposes.

Under the No Action alternative, the quota for 2022 and 2023 and then annually until changed would be based on the level of quota under the 2017 ICCAT recommendation (i.e., a baseline quota

of 632.4 mt, which is 79.1 mt (11 percent) lower than the level currently recommended). It should be noted, however, that other Contracting Parties fishing on the stock would be fishing on their allocations of the ICCAT-recommended TAC of 37,801 mt in Recommendation 21-04. Thus, under this alternative, the effective overall TAC for the stock would be 79.1 mt less than that authorized by ICCAT, or approximately 37,722 mt. As a result, Alternative B1 would have short- and long-term, neutral to minor, beneficial ecological impacts.

As in previous years, we anticipate that the United States would not harvest its entire quota. Because the fisheries would be authorized to catch that much quota, however, we are presuming catch of the full quota for purposes of analysis here.

Presuming that the United States were to catch all 632.4 mt, primarily by longline gear in in the Northwest Atlantic, and to a lesser extent in the Gulf of Mexico and Caribbean, as shown in Table 5, the ecological impacts would be short- and long-term, neutral to minor, beneficial. According to the most recent stock assessment, this level of catch, if the U.S. quota and the overall TAC are fully harvested, is expected to allow the relative abundance of northern albacore to continue to increase and for the stock status to remain not overfished with no overfishing occurring.

Alternative B1 would maintain the status quo by allowing carryforward of the previous year's northern albacore quota underharvest, up to 25 percent of the baseline quota, as specified first in Recommendation 07-02 for implementation in 2010, and currently specified under Recommendation 21-04. Carryforward of 25 percent of the baseline quota, i.e., increasing the U.S. northern albacore quota by 25 percent (or less than 1 percent of the TAC), would not be expected to have any additional ecological impacts on northern albacore beyond those described for implementation of the baseline quota, as the carryforward provisions are accounted for in the SCRS's evaluation of the effect of current regulations and management advice using the current stock assessment. Specifically, the SCRS stated that since the establishment of the TAC in the year 2001, catch remained substantially below the TAC in all but four years, which might have accelerated rebuilding over the last decade. The SCRS further stated that it is likely that the fluctuations in catches reflect the fluctuations in the availability of the resource to those local regional fisheries that have the bulk of the catch, and the carry over allows to compensate the fleets for the years when the stock was less available.

Alternative B2 would implement a U.S. quota of 711.5 mt and would be consistent with ICCAT Recommendation 21-04, including a TAC that results from the adopted HCR. The implementation of the quota at the recommended level could be expected to result in short-term, neutral to minor beneficial impacts to the northern albacore stock because the adopted TAC is within the range that the stock assessment and MP concluded would maintain the stock status. Compliance by other nations harvesting the stock under the northern albacore conservation and management program would also influence the effects of the TAC on the stock. This quota would remain the same unless modified in a future rulemaking.

Under Alternative B2, it is possible that fishing pressure could increase slightly due to the 79.1-mt increase in U.S. quota, but any such increase in effort likely would have a nominal effect in terms of actual increased landings compared against Alternative B1 (No Action alternative of

maintaining the current quota), since landings have been well below the quota for some time. Because northern albacore are often caught incidentally while targeting other species, an increase in the quota would not necessarily be expected to translate to an equivalent increase in landings.

Presuming that the United States were to catch all 711.5 mt, primarily by longline gear in in the Northwest Atlantic, and to a lesser extent in the Gulf of Mexico and Caribbean, as shown in Table 5, the ecological impacts would be short- and long-term, neutral to minor, beneficial. According to the most recent stock assessment, this level of catch, if the U.S. quota and the overall TAC are fully harvested, is expected to allow the relative abundance of northern albacore to continue to increase and for the stock status to remain not overfished with no overfishing occurring.

As in Alternative B1, Alternative B2 would maintain the status quo by allowing carryforward of the previous year's northern albacore quota underharvest, up to 25 percent of the baseline quota. Carryforward of 25 percent of the baseline quota, i.e., increasing the new U.S. northern albacore quota under this alternative by 25 percent (or less than 1 percent of the TAC), would not be expected to have any additional ecological impacts on northern albacore beyond those described for implementation of the baseline quota, as the carryforward provisions are accounted for in the SCRS's evaluation of the effect of current regulations and management advice using the current stock assessment. Specifically, the SCRS stated that since the establishment of the TAC in the year 2001, catch remained substantially below the TAC in all but four years, which might have accelerated rebuilding over the last decade. The SCRS further stated that it is likely that the fluctuations in catches reflect the fluctuations in the availability of the resource to those local regional fisheries that have the bulk of the catch, and the carry over allows to compensate the fleets for the years when the stock was less available.

Alternative B3, the preferred alternative, would implement an annual baseline U.S. northern albacore quota of 711.5 for 2022 and 2023, consistent with Recommendation 21-04. It would also authorize and analyze a maximum of 950 mt, as derived from the northern albacore MP and HCR adopted by ICCAT, to streamline later variations in quota adopted by ICCAT that result from application of the current MP. Note that under the MP, the maximum increase in the TAC from one management period to the next is 25 percent, up to the maximum of 50,000 mt. Additionally, under this alternative, the annual quota could still be adjusted based on over- and underharvests.

Alternative B3 would have the same impacts as Alternative B2 since northern albacore landings have been well below the quota and any increase in the quota is unlikely to significantly affect effort or landings. It is possible that fishing pressure could increase slightly due to the 79.1-mt increase in U.S. quota to 711.5 mt, but any such increase in effort likely would have a nominal effect in terms of actual increased landings compared against Alternative B1 (No Action alternative of maintaining the current quota), since landings have been well below the quota for some time. Presuming that the United States were to catch all 711.5 mt, primarily by longline gear in in the Northwest Atlantic, and to a lesser extent in the Gulf of Mexico and Caribbean, as shown in Table 5, Alternative B3 would have short- and long-term, neutral to minor beneficial impacts. According to the most recent stock assessment, this level of catch, if the U.S. quota and the overall TAC are fully

harvested, is expected to allow the relative abundance of northern albacore to continue to increase and for the stock status to remain not overfished with no overfishing occurring.

Likewise, a U.S. quota increase to the maximum of 950 mt would have a nominal effect in terms of actual increased landings. Presuming that the United States were to catch all 950 mt under a 50,000-mt TAC, Alternative B3 would have short- and long-term, neutral to minor beneficial impacts. The parameters of the northern albacore HCR include that "the maximum catch limit recommended is 50,000 mt in order to avoid adverse effects of potentially inaccurate stock assessments." TACs up to 50,000 mt, and the resulting U.S. quotas, would be set according to the MP and HCR to allow the stock status to remain not overfished with no overfishing occurring. Allowing for later increases in the baseline U.S. northern albacore quota through application of the adopted MP would allow for administrative efficiencies if and when the U.S. quota is further modified under future ICCAT recommendations applying the northern albacore MP and HCR. If measures beyond or different than those in Recommendation 21-04 were adopted or if the MP were altered, additional environmental effects analyses would be considered as appropriate.

As in Alternative B1, Alternative B3 would maintain the status quo by allowing carryforward of the previous year's northern albacore quota underharvest, up to 25 percent of the baseline quota. Carryforward of 25 percent of the baseline quota, i.e., increasing the new U.S. northern albacore quota under this alternative by 25 percent (or less than 1 percent of the TAC), would not be expected to have any additional ecological impacts on northern albacore beyond those described for implementation of the baseline quota, as the carryforward provisions are accounted for in the SCRS's evaluation of the effect of current regulations and management advice using the current stock assessment. Specifically, the SCRS stated that since the establishment of the TAC in the year 2001, catch remained substantially below the TAC in all but four years, which might have accelerated rebuilding over the last decade. The SCRS further stated that it is likely that the fluctuations in catches reflect the fluctuations in the availability of the resource to those local regional fisheries that have the bulk of the catch, and the carry over allows to compensate the fleets for the years when the stock was less available.

Bluefin Tuna Reserve Category Quota and Harvesting Bluefin Tuna and Northern Albacore via Authorized Fishing Activities

For bluefin tuna, the quota level proposed in this rule would be used by several fishing categories and gear types. In addition to allocating quota to specific subquota categories, the existing regulatory formula for quota distribution to domestic categories includes a provision that holds in reserve specific amounts of quota for inseason adjustments and authorized research activities, applying established regulatory determination criteria before effecting an inseason adjustment to any quota category.

As codified in the current regulations, the total amount of bluefin tuna that is held in reserve for inseason or annual adjustments and fishery-independent research using quotas or subquotas is 2.5 percent of the baseline annual U.S. bluefin tuna quota once 68 mt is subtracted and allocated to the Longline category quota. Thus, under Alternative A1, the No Action alternative, 29.5 mt would be

held in the Reserve for this purpose. Under Alternative A2, the preferred alternative, 31.2 mt would be held in the Reserve for this purpose, as shown in Table 1. The difference between the alternatives is 1.7 mt of quota for these purposes, which is a negligible amount for purposes of analyses. Thus, the discussion below applies to both alternatives.

In addition, the total amount of school bluefin tuna quota that is held in reserve (the "school reserve") for inseason or annual adjustments and fishery-independent research is 18.5 percent of the total school bluefin tuna Angling category subquota. NOAA Fisheries may allocate any portion of the Reserve for inseason or annual adjustments to any category in the fishery through an inseason action. NOAA Fisheries may allocate any portion of the School Reserve subquota for inseason or annual adjustments to the Angling category through an inseason action.

NOAA Fisheries also uses some quota from the Reserve (and other categories) to issue Exempted Fishing Permits (EFPs), display permits, and Scientific Research Permits (SRPs) for research activities involving the collection of biological samples, live animals, and tagging bluefin tuna, albacore, and other tunas. EFPs, display permits, and SRPs are issued under the authority of the Magnuson-Stevens Act and/or ATCA and may specifically exempt the researcher from certain regulatory provisions. These permits authorize collections of tunas, as well as other HMS, from Federal waters in the Atlantic Ocean and Gulf of Mexico for the purposes of scientific data collection and public display. Regulations at 50 CFR 600.745 and 50 CFR 635.32 govern scientific research activity, exempted fishing, and exempted educational activity with respect to Atlantic HMS. EFPs are issued to individuals for the purpose of conducting research or other fishing activities using private (non-research) vessels, whereas an SRP would be issued to Agency, state, or academic scientists who are using NOAA or bona fide research vessels as their platforms. Display permits are issued to aquaria or third party collectors that collect live bluefin tuna for public display.

Issuance of EFPs, SRPs, and display permits may be necessary to allow certain research activities to occur as the fisheries for bluefin tuna may be closed for extended periods during which collection of live animals and/or biological samples would otherwise be prohibited. In addition, sampling may require collecting undersize fish, sampling fish in excess of retention/bag limits, the use of unauthorized gears, the collection of fish without the necessary commercial or recreational permits (as research vessels are not required to obtain such permits), and/or the deployment of archival tags. Researchers are required to submit interim reports regarding collections within five days of the completion of a fishing trip and an annual report within 30 days of the expiration of a permit.

EFPs and SRPs have been issued for a wide range of research involving biological sampling of bluefin tuna, northern albacore, and other HMS to investigate, among other things, reproductive status, feeding habits, larval presence in the western Atlantic, movement patterns, habitat use, capture-related physiological stress, and seafood safety. In addition, genetic and otolith sampling has been conducted on young-of-year fish to determine the mixture of eastern and western origin yearling fish entering the U.S. mid-Atlantic fishery and develop abundance indices necessary for stock assessments for western Atlantic bluefin tuna. Efforts also continue to collect hard parts (i.e., otoliths and spines) representative of the recreational and commercial fisheries for use in determining both

age and stock structure of the bluefin tuna catches. Bluefin tuna sampling also has been conducted to update length-weight conversion tables.

In all cases, bluefin tuna mortality associated with an EFP, SRP, or display permit, is counted against the bluefin tuna Reserve category quota, school reserve subquota, or the quota applicable to the authorized vessels (e.g., if the fish were collected during regular commercial fishing operations and were sold). The impacts on the human environment from utilization of available bluefin tuna quota, including the Reserve and school reserve quotas for research and public display, were initially analyzed in the Amendment 7 FEIS. Since the change in Reserve quota would be negligible (1.7 mt) the Amendment 7 analyses are incorporated by reference. See the description of the alternatives in Chapter 2 of Amendment 7, page 28; description of the ecological impacts of the preferred alternative in Chapter 4, pages 240-241 and 382; and economic impacts of the preferred alternatives in Chapter 5, page 419. The 2021 bluefin tuna stock assessment indicated that total biomass has increased in recent years and the Reserve quota remains within the ICCAT-recommended U.S. bluefin tuna quota and TAC. Northern albacore mortality during permitted research activity would be counted against the U.S. northern albacore quota. NOAA Fisheries issued a total of 37 EFPs, SRPs, and display permits in 2021 for the collection of HMS. NOAA Fisheries authorized collection of 76 bluefin tuna (mostly young-of-the year fish) and zero northern albacore.

As noted above, the bluefin tuna Reserve and school reserve categories have been used to account for mortality of bluefin tuna under EFPs, SRPs, and display permits as these reserve categories were specifically set up to account for inseason adjustments and authorized research activities. Under both alternatives, NOAA Fisheries would continue to use the Reserve and school reserve categories to account for mortality associated with these types of permits. Mortality associated with these types of permits is usually a small percentage of the amount authorized for research activities, as evidenced by the number of bluefin tuna authorized for collection in 2021. However, mortality associated with these types of permits would not exceed the Reserve or school reserve quotas. Therefore, and since the change to the Reserve quota is negligible, and recognizing the positive results of the 2021 bluefin tuna stock assessment and 2020 northern albacore stock assessment, the impacts to the human environment associated with bluefin tuna and northern albacore mortality authorized under these permits would be consistent with the analyses conducted under the 2006 Consolidated HMS FMP and Amendment 7 and no further analysis is needed here.

4.2 Economic and Social Impacts

Bluefin Tuna Quota Alternatives

For a description of economic and social impacts related to the Codified Reallocation and Individual Bluefin Tuna Quota measures implemented for 2015 in the Amendment 7 final rule, see Chapter 5 (pages 409-487) of the Amendment 7 FEIS (NOAA Fisheries, 2014).

Alternative A1, the No Action alternative, would maintain economic impacts to the United States and to local economies at a distribution and scale similar to 2020, but may provide fewer fishing opportunities from the increased U.S. baseline quota as recommended by the 2021 ICCAT

recommendation and as implemented under ATCA. Actual landings increases from the increased quota may be nominal, however, given that the total U.S. baseline quota has not been landed in several years. See Section 3.3 for a description of the fishery through 2020 including prices, markets, and ex-vessel revenues. Thus, the economic impacts of the No Action alternative would be short- to long-term, and neutral.

Alternative A2 would provide short- to long-term, neutral to minor, beneficial economic impacts due to the additional quota of approximately 68 mt, depending on the quota category and fish availability and actual landings. These additional positive economic impacts would accrue to both the recreational and commercial sectors, as the increased quota would be distributed among them per codified quota regulations. For categories other than the Longline category, the increase in subquotas relative to the baseline level, under the U.S. quota in place in 2018 through 2021, is approximately 5 percent. For example, the General category baseline subquota was 555.7 mt in 2018 through 2021, and would be 587.9 mt under preferred Alternative A2. For the Longline category, the increase in baseline quota from 163.6 mt for 2018 through 2021 to 169.1 mt is approximately 3 percent, but that quota is then distributed to Individual Bluefin Quota (IBQ) shareholders and will result in small increases in the amount of individual quota available to IBQ program participants.

In the long term, neutral to minor, beneficial socio-economic impacts would be expected under Alternative A2 since total fishing mortality would remain at sustainable levels. The potential short-term socio-economic impacts of the increase in quota are expected to be neutral-to-minor, and beneficial. The realization of the positive socio-economic benefits would depend in part upon the ability of the fishery to harvest the quota and, in recent years, U.S. fishermen have not harvested the entire quota. Some of that underharvested quota will be available to the fishery consistent with ICCAT provisions and parallel domestic regulations regarding carryover from previous year's underharvest. Per the 2021 ICCAT recommendation, 10 percent of the total 2021 U.S. quota, or 127.29 mt, of that underharvest could be carried over to the 2022 fishing year (and placed in the Reserve category consistent with the codified quota regulations).

Under Alternative A1, total expected ex-vessel gross revenues would be similar to total ex-vessel gross revenues for fishing years since implementation of the previous ICCAT recommended U.S. quota in 2018, which were approximately $11.0 million in 2018, $9.8 million in 2019, and $8.4 million in 2020. Under Alternative A2, total ex-vessel gross revenues of approximately $10 million could be expected. (See Section 3.3 and Table 6 for additional information).

Northern Albacore Quota Alternatives

Alternative B1 would maintain economic impacts to the United States and to local economies at a distribution and scale similar to 2020, but would deny fishermen additional fishing opportunities from the increased U.S. baseline quota as recommended by the 2021 ICCAT Recommendation implemented consistent with ATCA. See Section 3.3 for a description of the fishery through 2020 including prices, markets, and ex-vessel revenues. Thus, economic impacts would be short- to long-term, and neutral. Alternative B2 would provide short- and long-term, neutral to minor, beneficial economic impacts due to the additional quota of 79.1 mt, depending on the ability of the fishery to

harvest the quota. Stability of the fishery was one of the performance indicators considered in the selection of the HCR rule that is the basis of the recommended TAC. Avoiding large changes in the TAC is beneficial in the long-term, as reflected in Recommendations 21-04.

Under Alternative B2, total ex-vessel gross revenues that could be expected to result would be similar to total ex-vessel gross revenues for fishing years since implementation of the ICCAT-recommended U.S. quota in 2018, which were approximately $335,570 in 2018, $571,281 in 2019, and $967,736 in 2020 (see Section 3.3 and Table 7 for additional information). While landings, and therefore total ex-vessel gross revenues, were higher in 2020 than in other years, in all years the full quota was not harvested. If the full quota under Alternative B2 were harvested, the total ex-vessel gross revenues would be $2.5 million (711.5 mt x $1.57). As such, Alternative B2 would have short- and long-term neutral to minor beneficial impacts.

Alternative B3 would have the same impacts as Alternative B2 since the northern albacore fishery is not quota limited and any increase in the quota is unlikely to affect effort or landings, including an increase to the maximum quota of 950 mt. If the maximum quota were ever harvested, the total ex-vessel gross revenues would be $3.3 million (950 mt x $1.57). Alternative B3 would have short- and long-term neutral to minor beneficial impacts.

Conclusion

Alternatives A2 and B3 are the preferred alternatives as they are consistent with the 2006 Consolidated HMS FMP as amended, ATCA, ICCAT Recommendations 21-07 and 21-04. Ecological impacts among the alternatives are similar except that, for bluefin tuna, there may be a slight increase in fishing effort associated with the minor increases of quota. However, NOAA Fisheries would continue to implement effort control measures as needed to ensure that landings do not exceed the U.S. quota and limit on school bluefin tuna. Overall beneficial economic and social impacts are also similar among alternatives with differences expected mainly in the short-term to the extent that the increases in quotas result in increased fishing opportunities. Actual impacts would largely be attributable to the availability of bluefin tuna and northern albacore and ability of fishery participants to harvest the quotas. Under each of the alternatives considered, there may be slight differences in the level of economic and social impacts experienced by specific individuals of the fisheries, as well as by participants within a particular fishery sector.

4.3 Impacts on Essential Fish Habitat

Pursuant to 16 U.S.C. 1853(a)(7), and as implemented by 50 C.F.R. § 600.815, the Magnuson-Stevens Act requires that an FMP identify and describe essential fish habitat (EFH) for each life stage of managed species, minimize to the extent practicable adverse effects of fishing activities on EFH including the cumulative effects of multiple fisheries activities, and identify other actions to encourage the conservation and enhancement of such habitat. If NOAA Fisheries determines that fishing gears are having an adverse effect on HMS EFH, or other species' EFH, then NOAA Fisheries must include management measures that minimize adverse effects to the extent practicable. Amendment 10 to the 2006 Consolidated HMS FMP analyzed the effects of fishing

activities on Atlantic HMS EFH, and indicated that most HMS gears are fished in the water column and the impacts on EFH are generally considered negligible. HMS gears do not normally affect the physical characteristics that define HMS EFH such as salinity, temperature, dissolved oxygen, and depth. Similarly, most HMS gears are not expected to impact other fisheries' EFH. Therefore, a determination was made that HMS gears, other than shark bottom longline, were not having a negative impact on EFH. Similarly, other state and federally managed gears were also determined not to have an impact on HMS EFH. Ecological impacts to EFH due to actions in this proposed rule would likely be neutral and have no adverse effects as the preferred alternative would not affect the range of gears used in the tuna fisheries or the nature of the use of gear. The preferred alternatives may change the amount of particular gear type used, but such changes would not affect EFH. Because the actions in this rule also would not significantly alter fishing gears or practices, it is anticipated that it would not have any adverse impacts to EFH, and the conclusion for Amendment 10 to the 2006 Consolidated HMS FMP is still applicable, so further consultation is not necessary.

4.4 Overview of Impacts on Protected Species

The preferred alternatives would not be expected to change endangered species or marine mammal interaction rates or magnitudes beyond those that occurred in recent years, substantially alter current fishing practices, or bycatch mortality rates.

Regarding compliance with the ESA, NOAA Fisheries issued two separate BiOps for HMS fisheries, one for HMS pelagic longline fisheries and one for all non-pelagic longline HMS fisheries. See Section 3.4 for detail on both BiOps.

The bluefin tuna and northern albacore quota increases in the preferred alternatives are not anticipated to affect ESA-listed species or critical habitat in any way not previously analyzed and are not likely to increase effort in a way that increases interactions with leatherback turtles or other protected resources, given that operations will remain consistent with the current restrictions on the pelagic longline and the commercial and recreational handgear fisheries in the relevant BiOps. NOAA Fisheries will continue to closely monitor the fisheries and will ensure compliance with the requirements of the BiOps.

Goals of the 2006 Consolidated HMS FMP, as amended, include implementing rebuilding plans, minimizing bycatch and bycatch mortality for overfished stocks, and managing healthy stocks for optimum yield. Bycatch reduction measures are in place under the HMS Bycatch Reduction Implementation Plan (discussed in Section 3.8 of the 2006 Consolidated HMS FMP), and the preferred alternative would not change any of the bycatch measures in place under the 2006 Consolidated HMS FMP, as amended, or the effectiveness of those measures. Chapter 6 of the 2021 SAFE Report lists and discusses the 22 marine mammal species that are, or could be, of concern with respect to potential interactions with HMS fisheries, and discusses how NOAA Fisheries addresses bycatch reduction, incidental catch, and protected species in HMS fisheries, including within the fisheries that are the subject of this proposed rulemaking. Table 6.2 summarizes the bycatch species, MMPA categories, ESA requirements, data collection, and management measures for HMS fisheries by fishery/gear type. Section 6.3.1 addresses interactions and the MMPA and ESA. Interactions with

non-listed marine mammals are managed in accordance with the MMPA "List of Fisheries" categories for each appropriate sector (including pelagic longline incidental catch of bluefin tuna and northern albacore), and the preferred alternatives are not anticipated to change effort in these fishery sectors in any manner that would increase the potential for interaction with non-listed marine mammals as previously analyzed in the 2006 Consolidated HMS FMP as amended. The preferred alternatives would not alter the measures undertaken to ensure MMPA or ESA compliance in those fisheries.

4.5 Environmental Justice Concerns

Executive Order (E.O.) 12898 requires that Federal agencies address environmental justice in the decision-making process. In particular, the environmental effects of Federal actions should not have a disproportionate effect on minority and low-income communities. This action would not have any effects on human health nor is it expected to have any disproportionate social or economic effects on minority and low-income communities. Any social or economic impacts are expected to be slightly positive in the short- and long-term through the potential increase in economic opportunities, and are anticipated to affect the fishing sectors and communities equally.

4.6 Coastal Zone Management Act (CZMA) Concerns

In 2011 and 2012, NOAA Fisheries determined that the rule to implement the bluefin tuna quotas (and other measures) and the 2012 quota specifications (to adjust the baseline quota and subquotas for prior-year underharvest), were consistent to the maximum extent practicable with the enforceable policies of the approved coastal management program of coastal states on the Atlantic including the Gulf of Mexico and the Caribbean Sea (76 FR 39019, July 5, 2011 and 77 FR 44161, July 27, 2012, respectively). Pursuant to 15 CFR 930.41(a), NOAA Fisheries provided the Coastal Zone Management Program of each coastal state a 60-day period to review those consistency determinations and to advise the Agency of their concurrence. NOAA Fisheries received concurrence with the consistency determinations from several states and inferred consistency from those states that did not respond within the 60-day time periods. In 2015 and 2018, NOAA Fisheries determined that the bluefin tuna quotas implemented in the Atlantic bluefin tuna and northern albacore quota rules were substantially similar to those in 2011 and 2012 when CZMA letters were sent to the states. Thus, the 2015 and 2018 Atlantic bluefin tuna and northern albacore quota rules were consistent to the maximum extent practicable with the enforceable policies of the approved coastal management program of coastal states on the Atlantic including the Gulf of Mexico and the Caribbean Sea, and individual letters to states were not necessary.

In 2014, NOAA Fisheries determined that the rule to implement the U.S. northern albacore quota and other measures that were included in Amendment 7 were consistent to the maximum extent practicable with the enforceable policies of the approved coastal management programs of coastal states on the Atlantic including the Gulf of Mexico and the Caribbean Sea (79 FR 71510, December 2, 2014). Pursuant to 15 CFR 930.41(a), NOAA Fisheries provided the Coastal Zone Management Program of each coastal state a 60-day period to review those consistency determinations and to advise the Agency of their concurrence. NOAA Fisheries received concurrence with the consistency

determinations from several states and inferred consistency from those states that did not respond within the 60-day time periods. In 2018, NOAA Fisheries determined that the northern albacore quota implemented in the Atlantic bluefin tuna and northern albacore quota rule was substantially similar to that in Amendment 7 when CZMA letters were sent to the states. Thus, the 2018 Atlantic bluefin tuna and northern albacore quota rule was consistent to the maximum extent practicable with the enforceable policies of the approved coastal management program of coastal states on the Atlantic including the Gulf of Mexico and the Caribbean Sea, and individual letters to states were not necessary.

NOAA Fisheries has determined that this proposed rule will not affect the coastal zone of any state beyond that previously analyzed in the consistency determinations for the bluefin tuna quota and quota specifications proposed rules sent to the states in 2011 and 2012 and the Amendment 7 proposed rule following publication of the applicable rules, as well as the 2015 and 2018 quota rules. This action is being taken to implement a 5.5-percent increase in the baseline annual U.S. bluefin tuna quota and a 12.5-percent increase in the baseline annual northern albacore quota, and these relatively small increases would apply coastwide from Maine to Texas, including the Caribbean (21 states and territories). Thus, the amount of increased quota available on an individual state basis would be relatively minor and is unlikely to affect fishing activity or practices within any given state in a manner that would warrant a new consistency determination or additional consultation. Furthermore, it would be consistent with the most recent ICCAT recommendations and the SCRS advice. Implementation of the recommended U.S. quotas will allow NOAA Fisheries to manage the fisheries as appropriate, including to not exceed the resulting fishing category subquotas for bluefin tuna. Consequently, no additional consistency consultation is required.

4.7 Comparison of Alternatives

Table 8 summarizes the determinations made above regarding ecological, social, and economic impacts of all the various alternatives, organized and subdivided by issue. A brief summary of the legal and administrative issues is also provided. As set forth above, no Environmental Justice or CZMA issues were identified.

Table 8 Comparison of Impacts of Alternatives

Alternative	Ecological Impacts (to bluefin tuna or to northern albacore, as applicable)	Ecological Impacts to other fish species	Protected Species	Economic Impacts	Social Impacts
Bluefin Tuna Quota					
A1. No Action	Short- and long-term minor, neutral to beneficial (No increase in effort)	Short- and long-term neutral (No increase in effort)	Short-and long-term neutral (No increase in effort)	Short- and long-term neutral	Short- and long-term neutral

A2. Implement 2021 ICCAT recommendation : **PREFERRED**	Short- and long-term minor, neutral to beneficial (Neutral effort or minor increase in effort)	Short- and long-term neutral (Neutral effort or minor increase in effort)	Short-and long-term neutral (Neutral effort or minor increase in effort)	Short- and long-term neutral to minor, beneficial	Short- and long-term neutral to minor, beneficial
Northern Albacore Quota					
B1. No Action	Short- and long-term, neutral to minor, beneficial (No increase in effort)	Short- and long-term neutral (No increase in effort)	Short-and long-term neutral (No increase in effort)	Short- and long-term neutral	Short- and long-term neutral
B2. Implement a static quota based on the 2021 ICCAT recommendation	Short- and long-term neutral to minor, beneficial (Neutral effort or minor increase in effort)	Short- and long-term neutral (Neutral effort or minor increase in effort)	Short-and long-term neutral (Neutral effort or minor increase in effort)	Short- and long-term neutral to minor, beneficial	Short- and long-term neutral to minor, beneficial
B3. Implement U.S. quotas in accordance with the ICCAT-adopted northern albacore MP, up to the maximum possible quota **PREFERRED**	Short- and long-term neutral to minor, beneficial (Neutral effort or minor increase in effort)	Short- and long-term neutral (Neutral effort or minor increase in effort)	Short-and long-term neutral (Neutral effort or minor increase in effort)	Short- and long-term neutral to minor, beneficial	Short- and long-term neutral to minor, beneficial

4.8 Cumulative Impacts

Cumulative impacts are the impacts on the environment that result from the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions. Cumulative impacts include the total effect on a natural resource, ecosystem, or human community due to past, present, and reasonably foreseeable future activities or actions of Federal, non-Federal, public, and private entities. Cumulative impacts may also include the effects of natural processes and events, depending on the specific resource. Cumulative impacts include 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, including the reasonably foreseeable impacts of a Federal activity. The goal of this section is to describe the cumulative ecological, economic, and social impacts of past, present, and reasonably foreseeable future actions with regard to the management measures presented in this document.

On May 21, 2021, NOAA Fisheries published a proposed rule and DEIS for Draft Amendment 13 to the 2006 Consolidated HMS FMP (Amendment 13; 86 FR 27686). This action is

not yet final. Amendment 13 proposes additional bluefin tuna management measures to meet FMP objectives, including to revise the bluefin tuna category percentages. Under current regulations, each quota category (including the Longline category) is annually allocated a percentage of the U.S. bluefin tuna quota after 68 mt (i.e., the historical 68-mt dead discard allowance, as described in Amendment 7) is subtracted from the baseline quota and allocated to the Longline category. This process was intended to have all bluefin tuna quota categories contribute proportionally to 68 mt provided to the Longline category annually. The proposed rule would eliminate the two-step process and, instead, make slight revisions to the category allocation percentages to include the 68 mt in the Longline category quota. The Longline category quota percentage would increase from 8.1 percent to 13.1 percent and the other category allocation percentages would be slightly modified accordingly. This methodology would apply regardless of the annual quotas.

Amendment 13 also proposes to discontinue the Purse Seine category through redistribution of Purse Seine category quota effective upon implementation of the Amendment 13 final rule. NOAA Fisheries would reallocate the Purse Seine category quota proportionally to the other directed bluefin quota categories (General, Angling, and Harpoon) and the Reserve category. For each category, the current and proposed quota percentages, respectively, are as follows: General category: 47.1 percent, 55.8 percent; Angling category: 19.7 percent, 23.4 percent; Harpoon category: 3.9 percent, 4.6 percent; and Reserve category: 2.5 percent, 3.0 percent.

In addition, Amendment 13 considers changes to the pelagic longline fishery regulations stemming from the Three-Year Review of the Individual Bluefin Quota program, recommendations of the AP, fishery participants, or the public. The Draft Amendment also considers regulatory changes for directed bluefin tuna fisheries, including the purse seine fishery and General category fishery. As set out in the Amendment 13 Draft EIS and Proposed Rule, minor beneficial ecological and socioeconomic impacts would be expected from the proposed measures in Amendment 13. In Chapter 5 of the Draft EIS, pages 320-344, NOAA Fisheries details past, present, and reasonably foreseeable future actions affecting the bluefin tuna fishery, including past and future inseason actions supporting management of the commercial and recreational bluefin tuna fisheries, the Deepwater Horizon Offshore Fishing Restoration Project with pelagic longline vessels in the Gulf of Mexico, establishment of the Northeast Canyons and Seamounts Marine National Monument, and the final rule that modified certain pelagic longline bluefin area-based and weak hook management measures (85 FR 18812, April 2, 2020). Those details and the Amendment 13 proposed rulemaking are included here by reference.

5.0 MITIGATION AND UNAVOIDABLE ADVERSE IMPACTS

5.1 Mitigating Measures

No adverse environmental impacts are expected to result from the preferred alternatives, thus no mitigating measures are proposed. Under the preferred quota alternatives, NOAA Fisheries would implement the 2021 ICCAT recommendations regarding bluefin tuna and northern albacore for 2022 until changed consistent with the requirements of ATCA, the MSA, and the scientific advice of the SCRS as part of overall conservation and management plans.

The U.S. domestic management program includes numerous management measures to implement ICCAT quota and management recommendations, consistent with the 2006 Consolidated HMS FMP as amended. NOAA Fisheries uses a variety of controls such as bluefin tuna subquotas, seasons, retention limits, size limits, and time/area closures to provide reasonable bluefin tuna fishing and harvest opportunities over a wide geographic range within available quotas, while minimizing negative environmental impacts. Using its inseason management authority, NOAA Fisheries would be able to monitor and make adjustments to the commercial bluefin tuna fishery close to "real time." Since NOAA Fisheries will continue to monitor the commercial bluefin tuna fishery, any unpredicted increase in effort and landings of bluefin tuna, should they occur, could be addressed within a fishing season. NOAA Fisheries also may adjust recreational effort controls inseason based on the best information available, but landings data are not available with the timing and frequency of commercial data (submitted within 24 hours to NOAA Fisheries through required landings reports for each fish) such that adjustments in recreational fishing effort may need to be made in subsequent fishing years.

5.2 Unavoidable Adverse Impacts

There are no unavoidable adverse impacts from the preferred alternatives.

5.3 Irreversible and Irretrievable Commitment of Resources

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

6.0 REGULATORY IMPACT REVIEW

This section assesses the economic impacts of the alternatives presented in this document. The RIR is conducted to comply with E.O. 12866 and provides analyses of the economic benefits and costs of each alternative to the nation and the fishery as a whole. Certain elements required in an RIR are also required as part of an EA. Thus, this section should be considered only part of the RIR. The rest of the RIR can be found throughout this document.

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

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

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

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

6.1 Description of the Management Objectives

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

6.2 Description of the Fishery

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

6.3 Statement of the Problem

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

6.4 Description of Each Alternative

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

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

NOAA Fisheries does not foresee that the national net benefits and costs would change significantly in the long term as a result of implementation of this action. The total amount of bluefin and northern albacore tuna potentially landed and available for sale under the action is expected to provide greater positive economic benefits than the No Action alternative. In the long term, both preferred alternatives would have positive economic impacts, as they are associated with TACs that are expected to allow for stock growth. Table 9 indicates the possible net economic benefits and costs of each alternative.

Table 9 Summary of expected net economic benefits and costs of analyzed alternatives

Alternative	Net Economic Benefits	Net Economic Costs
Bluefin Tuna Quota		
A1. No Action. Maintain U.S. quota in accordance with 2017 ICCAT bluefin tuna recommendations	Positive economic benefit	Opportunity cost of revenue foregone from not implementing 2021 ICCAT Recommendation
A2. Implement U.S. quota in accordance with 2021 ICCAT recommendation **(PREFERRED)**	Greater positive economic benefit than No Action as it provides additional quota and greater fishing opportunities.	N/A
Northern Albacore Quota		
B1. No Action. Maintain U.S. quota in accordance with 2017 ICCAT northern albacore recommendation	Positive economic benefit	Opportunity cost of revenue foregone from not implementing 2021 ICCAT Recommendation
B2. Implement U.S. quota in accordance with 2021 ICCAT northern albacore recommendation	Greater positive economic benefit than No Action as it provides additional quota and greater fishing opportunities.	N/A
B3. Implement U.S. quotas in accordance with the ICCAT-adopted northern albacore MP, up to the maximum possible quota (**PREFERRED**)	Greater positive economic benefit than No Action as it provides additional quota and greater fishing opportunities.	N/A

6.6 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. A summary of the expected net economic benefits and costs of each alternative can be found in Table 9.

7.0 INITIAL REGULATORY FLEXIBILITY ANALYSIS

This IRFA is conducted to comply with the Regulatory Flexibility Act (5 U.S.C. §§ 601 et seq.) (RFA). 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. Certain data and analysis required in an IRFA are also included in other Sections of this document.

7.1 Description of the Reasons Why Action is Being Considered

In compliance with section 603(b)(1) of the RFA, the purpose of this proposed rulemaking is, consistent with the 2006 Consolidated HMS FMP objectives, the Magnuson-Stevens Act, ATCA, and other applicable laws, to analyze the impacts of the alternatives for implementing the ICCAT-recommended U.S. bluefin tuna and northern albacore quotas and allocating the bluefin tuna quota per the codified quota regulations. See Section 1 for a full description of the reasons why this action is being considered.

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

In compliance with section 603(b)(2) of the RFA, the objective of this proposed rulemaking is to implement ICCAT recommendations consistent with ATCA and achieve domestic management objectives under the Magnuson-Stevens Act. See Section 1 for a full description of the objectives and legal basis for the proposed rule.

7.3 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 descriptions of, and where feasible, an estimate of the number of small entities to which the rule would apply. NOAA Fisheries established a small business size standard of $11 million in annual gross receipts for all businesses in the commercial fishing industry (NAICS 11411) for RFA compliance purposes. The Small Business Administration (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), which includes for-hire (charter/party boat) fishing entities. The SBA has defined a small entity under the scenic and sightseeing transportation (water) sector as one with average annual receipts (revenue) of less than $8.0 million.

NOAA Fisheries considers all HMS permit holders, both commercial and for-hire, to be small entities because they had average annual receipts of less than their respective sector's standard of $11 million and $8 million. Regarding those entities that would be directly affected by the preferred alternatives, the average annual revenue per active pelagic longline vessel is estimated to be $202,000, based on approximately 90 active vessels that produced an estimated $18.2 million in revenue in 2020, well below the NOAA Fisheries small business size standard for commercial fishing businesses of $11 million. No single pelagic longline vessel has exceeded $11 million in revenue in recent years.

Other non-longline HMS commercial fishing vessels typically earn less revenue than pelagic longline vessels and, thus, would also be considered small entities. Based on 2021 permit information, NOAA Fisheries predicts that the preferred alternatives would apply to the following numbers of non-pelagic longline permit holders that fish commercially or engage in commercial activities: 2,730 General category, 4,055 Charter/Headboat, 35 Harpoon category, and 34 seafood dealers that purchase bluefin tuna and northern albacore. There are no Purse Seine category permits

issued currently, however there are five historical participants in the purse seine fishery that are allocated bluefin tuna quota that may participate in the IBQ leasing program.

NOAA Fisheries has determined that the preferred alternatives would not likely directly affect any small organizations or small government jurisdictions defined under RFA, nor would there be disproportionate economic impacts between large and small entities.

This action would apply to all participants in the Atlantic tuna fisheries, *i.e.*, to the over 7,000 permit holders that held an Atlantic HMS Charter/Headboat or an Atlantic Tunas permit as of October 2021. This proposed rule is expected to directly affect commercial and for-hire fishing vessels that possess an Atlantic Tunas permit or Atlantic HMS Charter/Headboat permit. It is unknown what portion of HMS Charter/Headboat permit holders actively participate in the bluefin tuna and northern albacore fisheries or provide fishing services for recreational anglers. As summarized in the 2021 SAFE Report for Atlantic HMS, there were 7,106 commercial Atlantic tunas or Atlantic HMS permits in 2021, as follows: 2,730 in the Atlantic Tunas General category; 35 in the Atlantic Tunas Harpoon category; 284 in the Atlantic Tunas Longline category; 2 in the Atlantic Tunas Trap category; and 4,055 in the HMS Charter/Headboat category. The 90 active pelagic longline vessels described above are a subset of the 284 Atlantic Tunas Longline permits issued, 136 of which received IBQ shares. This constitutes the best available information regarding the universe of permits and permit holders recently analyzed. NOAA Fisheries has determined that this action would not likely directly affect any small government jurisdictions defined under the RFA.

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

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.

7.5 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 rule. Fishermen, dealers, and managers in these fisheries must comply with a number of international agreements, domestic laws, and other FMPs. These include, but are not limited to, the Magnuson-Stevens Act, ATCA, the High Seas Fishing Compliance Act, the MMPA, the ESA, the National Environmental Policy Act, the Paperwork Reduction Act, and the CZMA. This proposed action has been determined not to duplicate, overlap, or conflict with any relevant regulations, Federal or otherwise.

7.6 Description of any Significant Alternatives to the Proposed Rule that Accomplish the Stated Objectives of Applicable Statutes and that Minimize any Significant Economic Impact of

the Proposed Rule on Small Entities

One of the requirements of an IRFA is to describe any 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)). NOAA Fisheries examined each of these categories of alternatives. Regarding the first, second, and fourth categories, NOAA Fisheries 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. Thus, no alternatives are discussed that fall under the first and fourth categories described above. Amendment 7 implemented criteria for determining the availability of bluefin tuna quota for Purse Seine category participants and IBQs for the Longline category. These criteria under Amendment 7 and the eligibility criteria for IBQs for the Longline category can be considered individual performance standards. NOAA Fisheries has not yet found a practical means of applying individual performance standards to the other quota categories while concurrently complying with the Magnuson-Stevens Act. Thus, there are no alternatives considered under the third category.

This rulemaking proposes to implement the recently adopted ICCAT-recommended U.S. bluefin tuna and northern albacore quotas and, for bluefin tuna, to apply the allocations for each quota category per the codified quota regulations. This action would be consistent with ATCA, under which the Secretary promulgates regulations as necessary to implement binding ICCAT recommendations.

As described below, NOAA Fisheries analyzed several different alternatives in this proposed rulemaking and provides rationales for identifying the preferred alternatives to achieve the desired objectives. The IRFA assumes that each permit holder will have similar catch and gross revenues to show the relative impact of the proposed action on permit holders.

For bluefin tuna, NOAA Fisheries analyzed a No Action alternative, Alternative A1, that would maintain the current U.S. annual bluefin tuna quota of 1,247.86 mt and the current subquotas. NOAA Fisheries also analyzed Alternative A2, the preferred alternative, that would increase the U.S. annual bluefin tuna quota, as described below.

NOAA Fisheries has estimated the average impact that establishing the increased annual U.S. baseline bluefin tuna quota for all domestic quota categories under the preferred alternative would

have on individual categories and the permit holders within those categories. As mentioned above, the 2021 bluefin tuna ICCAT recommendation increased the annual U.S. baseline bluefin tuna quota for 1,316.14 mt and continues to provide 25 mt annually for incidental catch of bluefin tuna related to directed longline fisheries in the NED. The annual U.S. baseline bluefin tuna subquotas would be adjusted consistent with the process (*i.e.*, the formulas) established in Amendment 7 and as codified in the quota regulations (as shown in Tables 1 and 2), and these amounts (in mt) would be codified. The proposed rule for Amendment 13 (86 FR 27686, May 21, 2021) proposed modifications to the annual U.S. baseline bluefin tuna subquotas. NOAA Fisheries is completing a Final Environmental Impact Statement and final rule for Amendment 13. Amendment 13 does not affect the proposals in this action.

To calculate the average ex-vessel bluefin tuna revenues under this action, NOAA Fisheries first estimated potential category-wide revenues. The most recent ex-vessel average price per pound information for each commercial quota category is used to estimate potential ex-vessel gross revenues under the proposed subquotas (*i.e.*, 2021 prices for the General, Harpoon, Longline/Trap categories, and 2015 prices for the Purse Seine category). The proposed baseline subquotas could result in estimated gross revenues of $12.3 million annually, if finalized and fully utilized, broken out by quota category. Note that in recent years, the Purse Seine category has not landed any bluefin tuna and 75 percent of the Purse Seine quota has been transferred to the Reserve category, which typically is then transferred to the General category (this is a simplification for the purposes of this analysis, Reserve category quota can be transferred to any other category after consideration of regulatory criteria). The remaining 25 percent of Purse Seine category quota is available for leasing to Atlantic Tunas Longline permit holders under the IBQ Program. The following quota category amounts assume the 174.2 mt is transferred to the General category (75 percent of the purse seine quota) and 58.1 mt is available to the pelagic longline fishery (25 percent of the purse seine quota). Revenues in each category are as follows: General category: $9.3 million (762.1 mt * $5.55/lb); Harpoon category: $660,289 (48.7 mt * $6.15/lb); Purse Seine category: $0 million (0 mt * $3.21/lb); Longline category: $2.3 million (227.2 mt * $4.52/lb); and Trap category: $10,556 (1.2 mt * $3.99/lb).

Using the above methodology, the current baseline subquotas under Alternative A1 could result in estimated gross revenues of $11.6 million annually, if finalized and fully utilized, broken out by category. The following quota category amounts assume the 164.5 mt is transferred to the General category (75 percent of the purse seine quota) and 55 mt is available to the pelagic longline fishery (25 percent of the purse seine quota). Revenues in each category are as follows: General category: $8.8 million (720.2 mt * $5.55/lb); Harpoon category: $623,690 (46 mt * $6.15/lb); Purse Seine category: $0 (0 mt * $3.21/lb); Longline category: $2.2 million (218.6 mt * $4.52/lb); and Trap category: $10,556 (1.2 mt * $3.99/lb). Note that these revenues are likely an underestimation for the General and Harpoon categories, which typically receive additional quota from the Reserve category (*i.e.*, from the baseline Reserve subquota, and from the up to 10 percent of the U.S. baseline quota that could be carried forward from the previous year's underharvest). These revenues are likely an overestimation for the Longline and Trap categories, which do not typically land their entire quotas allocated for incidental bluefin tuna catch. For comparison, in 2021, gross revenues were approximately $12.0 million, broken out by category as follows: General--$10.5 million, Harpoon--$755,924, Purse Seine--$0, Longline--$753,067, and Trap--$0.

No affected entities would be expected to experience negative economic impacts as a result of this action. On the contrary, each of the bluefin tuna quota categories would increase relative to the baseline quotas that applied in prior years, and thus economic impacts would be expected to be positive.

To estimate the potential average ex-vessel revenues for each permit holder that could result from this action for bluefin tuna, NOAA Fisheries divided the potential annual gross revenues for the General, Harpoon, Purse Seine, and Trap category by the number of permit holders. For the Longline category, NOAA Fisheries divided the potential annual gross revenues by the number of permit holders that are IBQ share recipients. This is an appropriate approach for bluefin tuna fisheries, in particular, because available landings data (weight and ex-vessel value of the fish in price-per-pound) allow NOAA Fisheries to calculate the gross revenue earned by a permit holder on a successful trip. The available data (particularly from non-Longline permit holders) do not, however, allow NOAA Fisheries to calculate the effort and cost associated with each successful trip (*e.g.*, the cost of gas, bait, ice, etc.), so net revenue for each permit holder cannot be calculated. As a result, NOAA Fisheries analyzes the average impact of the proposed alternatives among all permit holders in each category using gross revenues. The potential annual gross revenues reflect the analysis above, in which the Purse Seine category quota was divided among the General and Longline categories.

Success rates for catching and landing bluefin tuna vary widely across permit holders in each category (due to extent of vessel effort and availability of commercial-sized bluefin tuna to permit holders where they fish), but for the sake of estimating potential revenues per permit holder, category-wide revenues can be divided by the number of permits in each category. For the Longline fishery, category-wide revenue is divided by the number of permits that received IBQ shares to determine potential revenue per the 136 permit holders that are IBQ share recipients, as indicated below, and actual revenues would depend, in part, on each permit holder's IBQ in 2022. It is unknown what portion of HMS Charter/Headboat permit holders actively participate in the bluefin tuna fishery. HMS Charter/Headboat vessels may fish commercially under the General category quota and retention limits. Therefore, NOAA Fisheries is estimating potential General category ex-vessel revenue changes using the number of General category permit holders only.

Estimated potential 2022 bluefin tuna revenues on a per permit holder basis under Alternative A1, the No Action alternative, considering the number of permit holders and estimated gross revenues listed above, under the current subquotas, could be $3,228 for the General category permit holders; $17,819 for the Harpoon category permit holders; $0 for the Purse Seine category (no active vessels); $16,010 for the Longline category (using 136 IBQ share recipients); and $5,279 for the Trap category permit holders. Estimated potential 2022 bluefin tuna revenues on a per permit holder basis under the preferred alternative, considering the number of permit holders and estimated gross revenues listed above and the proposed subquotas, could be $3,407 for the General category permit holders; $18,865 for the Harpoon category permit holders; $0 for the Purse Seine category (no active vessels); $16,912 for the Longline category (using 136 IBQ share recipients); and $5,279 for the Trap category permit holders.

As noted above, there are no active purse seine vessels landing bluefin tuna, but Purse Seine category participants do lease bluefin tuna quota to Atlantic Tunas Longline permit holders under the IBQ Program. As described in Draft Amendment 13, the recent lease price for Purse Seine category quota is $1.25/lb. Under Alternative A1, if the full 55 mt of Purse Seine quota were leased to the Longline category, revenue for Purse Seine category participants would be $151,568, or $30,314 per participant ($151,568 / 5 participants). Under Alternative A2, if the full 58.1 mt of Purse Seine quota were leased to the Longline category, revenue for Purse Seine category participants would be $160,111, or $32,022 per participant.

Because the directed commercial categories have underharvested their subquotas in recent years, the potential increases in ex-vessel revenues under both alternatives likely overestimate the probable economic impacts to permit holders in those categories relative to recent conditions. Additionally, there has been substantial interannual variability in ex-vessel revenues in each category in recent years, due to recent changes in bluefin tuna availability and other factors. Overall, because the U.S. quota has not been fully harvested in recent years and because the increase in quota under Alternative A2 is relatively minor, the expected economic impacts on individual permit holders as a result of this action is minor.

For northern albacore, NOAA Fisheries analyzed three alternatives. Alternative B1, the No Action alternative, would maintain the current U.S. baseline northern albacore quota of 632.4 mt. Alternative B2 would implement the 2021 northern albacore ICCAT recommendation that increased the annual U.S. baseline northern albacore quota to 711.5 mt. Alternative B3 would implement the 2021 ICCAT recommendation for northern albacore by establishing an annual baseline quota of 711.5 mt (the same level as in Alternative B2 for 2022) and would analyze and anticipate implementation of subsequent quotas set consistent with the MP's HCR, with a maximum of 950 mt, consistent with the process set out in Recommendation 21-04. This quota would be adjusted annually for overharvest and underharvest consistent with existing regulations and ICCAT recommendations.

NOAA Fisheries does not subdivide the U.S. northern albacore quota into category subquotas. The most recent ex-vessel average price per pound information is used to estimate potential ex-vessel gross revenues. Potential annual gross revenues are divided by the total number of Atlantic tunas or Atlantic HMS permit holders that are authorized to retain and sell northern albacore, however, note that not all permit holders will sell northern albacore each year. As described for bluefin tuna, this analysis excludes HMS Charter/Headboat permit holders and includes the 136 Atlantic Tunas Longline permit holders that received IBQ shares. In addition, trap category permit holders cannot retain northern albacore. The total number of permit holders that would potentially land northern albacore is 2,901 (2,730 in the Atlantic Tunas General category; 35 in the Atlantic Tunas Harpoon category; 136 in the Atlantic Tunas Longline category (IBQ share recipients)). If the entire quota is harvested under Alternative B1, the No Action alternative, estimated annual gross revenues would be $1.75 million (632.4 mt ww/1.25 * $1.57/lb dw) and average annual revenue across all permit holders would be $604 ($1.75 million / 2,901 permit holders). If the entire quota is harvested under Alternative B2, estimated annual gross revenues would be $1.97 million (711.5 mt ww/1.25 * $1.57/lb dw) and average annual revenue across all permit holders would be $679 ($1.97 million / 2,901 permit holders). If the entire maximum quota is harvested under Alternative B3, the preferred

alternative, estimated annual gross revenues would be $2.63 million (950 mt ww/1.25 * $1.57/lb dw) and average annual revenue across all permit holders would be $907 ($2.63 million / 2,901 permit holders). In the short-term, Alternative B3 would set the same quota and produce the same estimated revenue as Alternative B2.

Because the directed commercial fishery has underharvested the quota in recent years, the potential increases in ex-vessel revenues under the three analyzed alternatives likely overestimate the probable economic impacts relative to recent conditions. Additionally, there has been substantial interannual variability in ex-vessel revenues in recent years, due to recent changes in northern albacore availability and other factors. Overall, because the U.S. quota has not been fully harvested in recent years and because the increase in quota under Alternative B3 is relatively minor, the expected economic impacts on individual permit holders as a result of this action is minor.

8.0 COMMUNITY PROFILES

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

Profiles for the following communities were included in Section 3.8 of the Amendment 7 FEIS and updated in the 2021 HMS SAFE Report: Gloucester and New Bedford, MA; Wakefield-Peacedale, RI; Montauk, NY; Brielle, Barnegat Light, and Cape May, NJ; Ocean City, MD; Wanchese, Beaufort, Morehead City, and Atlantic Beach, NC; Fort Pierce, Port Salerno, Pompano Beach, Islamorada, Madeira Beach, Apalachicola, Panama City, and Destin, FL; Orange Beach, AL; Venice, Grand Isle, and Dulac, LA; Freeport and Port Aransas, TX. These communities are analyzed for social impacts in this action due to the importance of bluefin tuna fishing to the community.

The impacts of the action will be neutral to minor in all of these communities. The action to increase the bluefin tuna and could increase the time vessels spend fishing for bluefin tuna but could also allow fishermen more time to plan activities with their families during the fishing season because the fishing seasons may be longer, depending on the availability of bluefin tuna. Additionally, because individual bluefin tuna fishermen might land more fish with a higher U.S. quota and might fish for longer during the season, dealers, suppliers, and other related industries within the community could experience positive benefits. Because northern albacore landings have not recently approached the available U.S. quota and because northern albacore are often caught incidentally while targeting other species, no change in fishing behavior would be expected.

9.0 APPLICABLE LAW

9.1 Magnuson-Stevens Act

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

NS 1 requires NOAA Fisheries to prevent overfishing while achieving, on a continuing basis, optimum yield from each fishery for the U.S. fishing industry. This action is consistent with NS 1 in that it would prevent overfishing of bluefin tuna and northern albacore and manage the U.S. fisheries for these stocks consistently with the interim measures recommended by ICCAT, in anticipation of longer term management under MPs. NOAA Fisheries continues to limit bluefin tuna and northern albacore mortality by U.S. fishermen in accordance with the strict quota limits set by ICCAT and established under approved conservation and management programs. As described in Section 3, the 2021 SCRS advice is to manage the bluefin tuna stock sustainably, and has established an MP and HCR for the management of northern albacore. ICCAT has recommended relatively small increases in the TACs and in the annual U.S. quotas (i.e., approximately 5.5 percent for bluefin tuna and 12.5 percent for northern albacore) after considering the SCRS advice.

NS 2 requires that conservation and management measures be based on the best scientific information available. The preferred alternatives are based on ICCAT SCRS assessments. The SCRS is comprised of stock assessment scientists from numerous ICCAT Contracting Parties, including the United States, and their stock assessments are subject to rigorous analysis and review by a panel of experts from participating ICCAT Contracting Parties. NOAA Fisheries has determined the SCRS assessments to be the best scientific information available.

NS 3 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 preferred alternatives reflect management of both the western Atlantic bluefin tuna and northern albacore stocks as units, throughout their range in the U.S. Exclusive Economic Zone (EEZ). The fact that the ranges of these Atlantic highly migratory species stocks extend beyond the U.S. EEZ is reflected in the development, implementation, and enforcement of conservation and management measures with ICCAT Contracting Parties throughout the Atlantic Ocean and the adjacent seas.

NS 4 requires that conservation and management measures 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; should 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 are not expected to discriminate between residents of different States. The measures considered in this action would subject all fishermen to the same rules regardless of their state of residence. This action does not allocate or assign fishing privileges (i.e., limited access privilege programs) among various fishermen.

NS 5 requires that conservation and management measures should, where practicable, consider efficiency in the utilization of fishery resources, with the exception that no such measure has economic allocations as its sole purpose. The preferred alternatives would change the overall U.S. quotas for bluefin tuna and northern albacore. The quota will be distributed and managed consistent with existing conservation and management measures, which appropriately considered efficiency in the utilization of fishery resources through the rulemaking processes that adopted those measures. No additional efficiency considerations are presented with this proposed rulemaking.

NS 6 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 would change the overall U.S. quotas for bluefin tuna and northern albacore. The bluefin tuna quota will be distributed and managed consistent with existing conservation and management measures, which appropriately considered variations among, and contingencies in, fisheries, fishery resources, and catches through the rulemaking processes that adopted those measures. Since the relevant portions of this rule only implement the new quotas and do not further impact their distribution or management, additional considerations regarding variations among, and contingencies in, fisheries, fishery resources, and catches are not presented with this proposed rulemaking.

NS 7 states that conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication. The preferred alternatives in this document would not implement new requirements that would increase costs for fishermen nor duplicate any current requirements.

NS 8 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 are consistent with NS 8. The socioeconomic impacts of these alternatives are expected to be neutral to beneficial.

NS 9 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 are consistent with NS 9. The preferred alternatives are not expected to cause significant changes in fishing effort, areas, or practices, and thus are not expected to lead to increases in potential bycatch or increased interactions with non-target, incidentally caught species, including protected species. Goals of the 2006 Consolidated HMS FMP, as amended, include implementing rebuilding plans, minimizing bycatch and bycatch mortality for overfished stocks, and managing healthy stocks for optimum yield. Bycatch reduction measures are in place under the HMS Bycatch Reduction Implementation Plan, and the preferred alternative would not change any of the bycatch measures in place under the 2006 Consolidated HMS FMP, as amended, or the effectiveness of those measures. Chapter 6 of the 2021 SAFE Report lists and discusses the 22 marine mammal species that are, or could be, of concern with respect to potential interactions with HMS fisheries, and discusses how NOAA Fisheries addresses bycatch reduction, incidental catch, and protected species

in HMS fisheries, including within the fisheries that are the subject of this proposed rulemaking. Table 6.2 summarizes the bycatch species, MMPA categories, ESA requirements, data collection, and management measures for HMS fisheries by fishery/gear type. Section 6.3.1 addresses interactions and the MMPA and ESA. Interactions with non-listed marine mammals are managed in accordance with the MMPA "List of Fisheries" categories for each appropriate sector (including pelagic longline incidental catch of bluefin tuna and northern albacore), and the preferred alternatives are not anticipated to change effort in these fishery sectors in any manner that would increase the potential for interaction with non-listed marine mammals as previously analyzed in the 2006 Consolidated HMS FMP as amended. The preferred alternatives would not alter the measures undertaken to ensure MMPA or ESA compliance in those fisheries.

NS 10 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 NS 10 because no impact to safety of life at sea is anticipated to result from these preferred alternatives. The management measure in the preferred alternatives would not require fishermen to travel greater distances, fish in bad weather, or otherwise fish in an unsafe manner.

9.2 Paperwork Reduction Act

This action contains no new collection-of-information requirements subject to the Paperwork Reduction Act.

9.3 E.O. 13132

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

10.0 LIST OF PREPARERS/AGENCIES AND PERSONS CONSULTED

This EA/RIR/IRFA was prepared by staff of the HMS Management Division, Office of Sustainable Fisheries. Please contact the HMS Management Division for a complete copy of current regulations for the Atlantic tunas fisheries.

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Discussions relevant to the preparation of this EA/RIR/IRFA involved input from several NOAA Fisheries components and constituent groups, including: NOAA Fisheries Southeast Fisheries Science Center; NOAA Fisheries Office for Law Enforcement; NOAA Fisheries Office of Science and Technology; NOAA Office of the General Counsel, Fisheries and Protected Resources Section; and NOAA Fisheries Pacific Islands Regional Office.

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Appendix 1 - Recent Applicable ICCAT Recommendations

Recent Applicable ICCAT Recommendations -- Western Atlantic Bluefin Tuna

2014 ICCAT Recommendation (ICCAT Recommendation 14-05 -- Recommendation by ICCAT Amending the Supplemental Recommendation by ICCAT concerning the Western Atlantic Bluefin Tuna Rebuilding Program)

At its 2014 annual meeting, following consideration of the 2014 stock assessment update (i.e., an update of the projections from the 2012 stock assessment with catch data through 2013), ICCAT adopted a recommendation that included a TAC of 2,000 mt annually (i.e., an increase of approximately 14 percent from 1,750 mt) for 2015 and for 2016. This amount was expected to allow for continued stock growth under both low and high stock recruitment scenarios, discussed in Section 3, considering the 2014 recent stock assessment results. The recommended annual U.S. quota was 1,058.79 mt, and the recommended total U.S. quota, including 25 mt to account for bycatch related to pelagic longline fisheries in the Northeast Distant gear restricted area, was 1,083.79 mt. Key provisions from prior recommendations were maintained, including:

- An allocation scheme that includes the United States, Canada, Japan, the United Kingdom (in respect of Bermuda), France (in respect of St. Pierre and Miquelon), and Mexico. The amount of TAC allocated to the Contracting Parties depends on the amount of the overall recommended TAC.
- As a method for limiting fishing mortality on juvenile bluefin tuna, ICCAT continued to recommend a tolerance limit on the harvest of bluefin tuna measuring less than 115 cm (straight fork length) to no more than 10 percent by weight of a Contracting Party's total initial bluefin tuna quota over the management period (i.e., 2015 and 2016). The United States implemented this provision by limiting the harvest of school bluefin tuna (measuring 27 to less than 47 inches curved fork length) as appropriate to not exceed the 10-percent limit annually in 2015 and 2016.
- A limit on the amount of unused quota Contracting Parties may carry forward to 10 percent of their total initial bluefin tuna quota. This limited the amount of 2012 U.S. underharvest carried forward to 2015 to 94.9 mt (10 percent of the 948.7-mt total U.S. quota for 2014).

Other notable aspects of ICCAT Recommendation 14-05 included:

- Requests that the SCRS provide guidance on fish size management measures and impact on yield/recruit and spawner/recruit, as well as effect of fish size management measures on ability to monitor stock status;
- Calls for Contracting Party collaboration in the improvement of existing indices of abundance and the development of new combined indices.

2016 ICCAT Recommendation (ICCAT Recommendation 16-08 -- (Recommendation by ICCAT Amending the Supplemental Recommendation by ICCAT concerning the Western Atlantic Bluefin Tuna Rebuilding Program)

In 2016, the SCRS updated the projections from the 2014 stock assessment using 2014 and 2015 catch data, but the SCRS advice did not change from 2014. At its 2016 annual meeting in Vilamoura, Portugal, ICCAT maintained the TAC and U.S. bluefin tuna quota as a one-year "rollover" of the existing quotas for ICCAT Contracting Parties. Text was added to the provision to clarify text regarding the tolerance limit of bluefin tuna weighing less than 115 cm to ensure that any overharvest of the tolerance limit in one year is subtracted from the tolerance limit in the next year or the year after that.

2017 ICCAT Recommendation (ICCAT Recommendation 17-06 -- Recommendation by ICCAT for an Interim Conservation and Management Plan for Western Atlantic Bluefin Tuna)

At its 2017 annual meeting, ICCAT accepted the results of a 2017 stock assessment and adopted a recommendation for an interim conservation and management plan for western Atlantic bluefin tuna for 2018 through 2020. An interim approach was selected in light of the SCRS' new stock assessment approach and ICCAT's commitment to develop MPs for the stock by 2020. (See Section 3 for 2017 bluefin tuna stock assessment and stock status information.)

MPs (sometimes called harvest strategies) include stock monitoring, HCRs, and MSE. HCRs implement pre-agreed management actions that will occur in response to various stock status and other performance indicators to help ensure identified management objectives are achieved. MSE is an inclusive, interactive, and iterative process for evaluating the performance of potential HCRs and reference points (such as target biomass) in relation to management objectives, including the risk associated with not achieving those objectives.

The 2017 recommendation included a TAC of 2,350 mt annually (*i.e.*, an increase of approximately 17.5 percent) for 2018-2020. The recommended annual U.S. quota was 1,247.86 mt, and the recommended total U.S. quota, including 25 mt to account for bycatch related to pelagic longline fisheries in the Northeast Distant gear restricted area (NED), was 1,272.86 mt. Relevant provisions of the *Recommendation by ICCAT Amending the Supplemental Recommendation by ICCAT Concerning the Western Atlantic Bluefin Tuna Rebuilding Program* (Recommendation 16-08) were also maintained in Recommendation 17-06, such as those involving the quota sharing arrangement, effort and capacity limits, the 10-percent limit on the amount of unused quota Contracting Parties may carry forward, minimum fish size requirements and protection of small fish (including the 10-percent tolerance limit on the harvest of bluefin tuna measuring less than 115 cm and the procedures for addressing overharvest of the tolerance limit), area and time restrictions, transshipment, scientific research, and data and reporting requirements.

The recommendation text was updated to reflect the new quotas for Contracting Parties fishing on the stock, although no change was made to the allocation percentages from the previous recommendations (i.e., Contracting Parties received the same percentage shares). The

recommendation also updated the numbers in provisions regarding quota transfers between Contracting Parties and carry-over allocations, to reflect the effect of the new quota. Lastly, text was added to the instructions ICCAT provides the SCRS regarding spawning times and areas, requesting advice on the efficacy of the Gulf of Mexico directed fishery prohibition in reducing mortality of spawning age bluefin tuna.

2018 ICCAT Recommendation (ICCAT Recommendation 18-03 -- Resolution by ICCAT on Development of Initial Management Objectives for Eastern and Western Atlantic Bluefin Tuna)

ICCAT adopted Resolution 18-03 on the Development of Initial Management Objectives for Eastern and Western Atlantic bluefin tuna. This resolution detailed the anticipated work over the next year by ICCAT and the SCRS to develop bluefin tuna management objectives for potential adoption by ICCAT in 2019. Development of these objectives is an important element to transitioning to the MP for bluefin tuna stocks, which ICCAT has recommended for bluefin tuna and other priority stocks to manage fisheries in the face of identified uncertainties, and the process is ongoing as of March 2022.

2020 ICCAT Recommendation (ICCAT Recommendation 20-06 -- Recommendation by ICCAT amending Rec. 17-06 for an Interim Conservation and Management Plan for Western Atlantic Bluefin Tuna)

Due to the pandemic in 2020, ICCAT canceled its annual meeting and conducted discussions via correspondence. Recognizing the significant challenges of complex decision making by correspondence, rollover of expiring measures was ICCAT's default approach. For western Atlantic bluefin tuna, following a stock assessment update, ICCAT adopted Recommendation 20-06, which rolled over the existing TAC for 2020 (in Recommendation 17-06); provided for a 2021 stock assessment that would incorporate the most recent available data; and specified TAC levels for 2022 and 2023 that ICCAT would endorse to address overfishing based on the 2020 stock assessment update, unless ICCAT decided other action is appropriate based on new SCRS advice. Recommendation 20-06 committed to continuing the important work of the SCRS on bluefin tuna MSE and continued the management measures in Recommendation 17-06.

2021 ICCAT Recommendation (ICCAT Recommendation 21-07 -- Recommendation by ICCAT amending Recommendation 17-06 for an Interim Conservation and Management Plan for Western Atlantic Bluefin Tuna)

Following the 2021 western Atlantic bluefin tuna stock assessment, ICCAT adopted Recommendation 21-07 for the western Atlantic bluefin tuna stock. This recommendation includes a one-year TAC of 2,726 mt (i.e., an increase of approximately 16 percent) for 2022. ICCAT identified this TAC as a precautionary TAC that prevents overfishing with a high probability, prioritizes continued stock growth, including into the long-term, and ensures relative stability by avoiding a large fluctuation in catches. The recommended baseline annual U.S. quota is 1,316.14 mt, and the recommended total U.S. quota, including 25 mt to account for bycatch related to pelagic longline

fisheries in the NED, is 1,341.14 mt. Relevant provisions of the interim conservation and management plan under Recommendation 17-06 were also maintained in Recommendation 21-07.

Panel 2 is the ICCAT subgroup that focuses on temperate tuna issues and presents recommendations to the Commission for consideration and potential adoption. Consistent with Recommendation 21-07, ICCAT has scheduled three manager-scientist dialogue meetings (i.e., of the SCRS and Panel 2) to be held in 2022 to ensure that the MSE process can be completed on schedule. ICCAT anticipates that the SCRS will complete the MSE, including providing candidate MPs to ICCAT for consideration, in 2022, with a view to ICCAT's adoption of a MP to set TACs for 2023 onward.

Recent Applicable ICCAT Recommendations – Northern Albacore

Recommendation 15-04 (Recommendation by ICCAT to Establish Harvest Control Rules for the Northern Albacore Stock)

In 2015, ICCAT adopted Recommendation 15-04 as a first step in establishing HCRs/MSE for priority stocks. Recommendation 15-04 defined the northern albacore management objectives, both during the rebuilding period and once rebuilt, and outlined the process by which candidate reference points (i.e., threshold and limit biomass levels and the target fishing mortality rate) and associated HCRs would be identified and tested by the SCRS. The intent was that the Commission would eventually select one of these candidate HCRs, as well as pre-agreed management actions to be taken under various stock conditions (e.g., when the biomass levels are determined to be below threshold or limit levels).

2016 ICCAT Recommendation (ICCAT Recommendation 16-06 -- Recommendation by ICCAT on a Multi-Annual Conservation and Management Program for North Atlantic Albacore)

A 2016 SCRS stock assessment showed that the northern albacore stock was no longer overfished and not subject to overfishing, and ICCAT subsequently determined that a rebuilding program was no longer needed. See Section 3 for 2016 northern albacore stock assessment and stock status information. ICCAT adopted Recommendation 16-06 as a conservation and management program for the stock, maintaining the 28,000-mt annual TAC from the prior recommendation for 2017 and 2018, with the possibility of an increase to 30,000 mt for 2019-2020 subject to a decision by the Commission based on updated SCRS advice in 2018. The recommendation also provided that, in the event that ICCAT adopted an HCR during the 2017-2020 period, the TAC would be modified accordingly. The recommended annual U.S. quota under that Recommendation was 527 mt. Key provisions continued to include: quotas for the major harvesters and catch limits for other Contracting Parties and a 10-percent limit on the amount of unused quota Contracting Parties may carry forward.

Recommendation 16-06 also incorporated capacity management measures from other active recommendations, including language establishing an authorized vessel list for northern albacore, provisions regarding anticipated HCRs and MSE for the stock, and performance indicators to support

future decision making.

Following the 2016 stock assessment, NOAA Fisheries applied domestic stock status determination criteria and concluded that the status of the stock should be changed from "not overfished – rebuilding" to "rebuilt."

2017 ICCAT Recommendation (ICCAT Recommendation 17-04 -- Recommendation by ICCAT on a Harvest Control Rule for North Atlantic Albacore Supplementing the Multiannual Conservation and Management Program, Rec. 16-06)

In 2017, following consideration of SCRS' work to test a set of HCRs through MSE simulations, ICCAT adopted an interim HCR for northern albacore, the first for any ICCAT stock, with the goal of adopting a long-term HCR following further MSE testing over the next few years. The Recommendation established various biomass and fishing mortality rate reference points, and included the specific HCR formula and figure, as well as the formula for setting the appropriate fishing mortality rate and, in turn, the TAC. The 3-year constant annual TAC adopted by ICCAT in 2017 was 33,600 mt for 2018-2020; this 20-percent increase from the prior 28,000-mt TAC was consistent with the Commission's chosen stability clause, which limits the TAC increase to 20 percent. Application of ICCAT's northern albacore allocations to Contracting Parties resulted in a U.S. quota of 632.4 mt, which was a 20-percent increase from the current 527-mt quota. The recommendation calls on the SCRS to continue to develop the MSE framework over the 2018-2020 period and called on ICCAT to review the interim HCR in 2020 with a view to adopting a long-term MP at that point. ICCAT indicated that it planned to consolidate Recommendations 17-04 and 16-06, as well as consider refinements of the interim HCR, at the 2018 Commission meeting.

2020 ICCAT Recommendations (ICCAT Recommendation 20-03 -- Recommendation by ICCAT amending the Recommendation 16-06 Establishing a Multi-annual Conservation and Management Programme for North Atlantic Albacore) and (ICCAT Recommendation 20-04 -- Recommendation by ICCAT amending the Recommendation 17-04 on a Harvest Control Rule for North Atlantic Albacore Supplementing the Multi-annual Conservation and Management Programme in Rec. 16-06)

In 2020, ICCAT adopted Recommendation 20-04, a one-year recommendation that established a new TAC of 37,801 mt for 2021 (a 12.5 percent increase from the prior TAC of 33,600 mt), based on the existing HCR. The TAC allocation percentages among ICCAT parties did not change and resulted in a U.S. quota of 711.5 mt. ICCAT also updated other aspects of northern albacore management for 2021 in Recommendation 20-03 and, as consolidation of relevant management measures had not yet occurred, indicated that it planned to consolidate relevant provisions of Recommendations. 20-03 and 20-04 into a single recommendation at the 2021 ICCAT annual meeting.

2021 ICCAT Recommendation (ICCAT Recommendation 21-04 --Recommendation by ICCAT on Conservation and Management Measures, including a Management Procedure and Exceptional Circumstances Protocol, for North Atlantic albacore)

In 2021, ICCAT adopted Recommendation 21-04, a conservation and management measure that integrates the two prior northern albacore recommendations (Recommendations 20-03 and 20-04) into one and incorporates all of the needed components of a long-term MP. An MP is an approach to fisheries management decision making that applies a pre-agreed framework for actions, such as catch limits, that are designed to achieve specific management objectives, like meeting conservation obligations and providing stability in fisheries. The MP establishes reference points, dictates that stock assessments shall be conducted every three years, sets a three-year constant annual TAC using values estimated from each stock assessment, and contains an HCR. The parameters of the HCR include the following: the maximum catch limit recommended is 50,000 mt in order to avoid adverse effects of potentially inaccurate stock assessments; and the maximum change in the catch limit shall not exceed 25 percent in case of increase or 20 percent in case of decrease of the previous recommended catch limit when the current biomass is greater than or equal to the biomass threshold level. The recommendation called on the SCRS to further test HCRs supporting management objectives over 2022-2023. Additionally, the recommendation called on the Commission to review the MP established to consider if any revisions are needed taking into account any further analyses of HCRs over 2022-2023.