

Amendment 9

Fishery Ecosystem Plan for Pelagic Fisheries of the Western Pacific

Modifications to the American Samoa Longline Limited Entry Program
including a Draft Environmental Assessment and Regulatory Impact Review

June 23, 2021



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Abstract

The American Samoa longline fishery primarily targets albacore tuna and is managed under the Western Pacific Fishery Management Council's (Council) Fishery Ecosystem Plan for Pelagic Fisheries of the Western Pacific Region (FEP). In 2002, the Council established a limited entry program with criteria for participation in the fishery to manage capacity in the then-rapidly developing fishery. In 2005, the National Marine Fisheries Service (NMFS) implemented the program and issued 60 limited access permits to qualified candidates distributed among four vessel classes based on size. The management objectives of the limited entry program are to: 1) prevent localized depletion of fishery resources, 2) maintain sustained community participation in the fishery, 3) ensure opportunities for participation by indigenous American Samoans, 4) reduce gear conflicts, and 5) minimize fish bycatch. Over time, the small vessel (less than 50 ft) fleet within the longline fishery has steadily contracted due to multiple external sources, including the economic costs incurred to go fishing, reduced albacore catch rates, and lower prices. In 2001, there were 43 small vessels participating in the fishery, but from 2010 to present, only one small vessel has been operating. This combined FEP amendment and environmental assessment (EA)¹ describes proposed modifications to the limited entry program that are intended to reduce programmatic barriers that are believed to be hampering small vessel participation in the fishery.

The proposed action includes the following changes to the limited entry program:

- a) Replace the four vessel classes with two, where Class A and B vessels would be classified as "small" vessels, and Class C and D vessels would be classified as "large" vessels;
- b) Restrict permit ownership to U.S. citizens and nationals, and eliminate the requirement to have documented history of participation to be eligible for a permit, but maintain the priority ranking system based on earliest documented history of fishing participation in vessel class size, if there is competition between two or more applicants for a permit;
- c) Require that permits can only be transferred among U.S. citizens or nationals, and eliminate the requirement for documented participation in American Samoa longline fishery to receive a transferred permit;
- d) Reduce the "small" vessel class minimum harvest requirement to 500 lb of pelagic management unit species (MUS within a 3-year period, but maintain the existing 5,000 lb harvest for the "large" vessel class;
- e) Require that the entire minimum harvest amounts for the respective vessel classes are to be landed in American Samoa within a three-year permit period, but that the minimum harvests not be required to be caught within the U.S. EEZ around American Samoa;
- f) Specify a fixed three-year permit period that is the same as the three-year period to make a minimum harvest requirement; and
- g) Require that the minimum harvest period not restart in the event of a permit transfer and that if the minimum harvest amount has not been caught at the time of transfer, the new permit owner would be required to meet the harvest requirement based on the

¹ This EA is being prepared using the 1978 CEQ NEPA Regulations. NEPA reviews initiated prior to the effective date of the 2020 CEQ regulations may be conducted using the 1978 version of the regulations. The effective date of the 2020 CEQ NEPA Regulations was September 14, 2020. This review began on [insert DATE this action was filed with NOAA NEPA] and the agency has decided to proceed under the 1978 regulations.

following formula: the product of percentage of time left within the three-year permit period and the minimum harvest amount.

How to Comment

NMFS is seeking public comment on proposed Amendment 9, including a draft Environmental Assessment and Regulatory Impact Review. You may submit comments by either of the following methods:

- **Electronic Submission:** Submit all electronic comments via the Federal e-Rulemaking Portal. Go to <http://www.regulations.gov> and enter NOAA-NMFS-2018-0023 in the Search box, click the “Comment” icon, complete the required fields, and enter or attach your comments.
- **Mail:** Send written comments to Michael D. Tosatto, Regional Administrator, NMFS Pacific Islands Region (PIR), 1845 Wasp Blvd. Bldg. 176, Honolulu, HI 96818.

If you need assistance with this document, please contact NMFS at 808-725-5000.

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Fishery Ecosystem Plan for Pelagic Fisheries of the Western Pacific Region: Modifications
to the American Samoa Longline Limited Entry Program

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Acronyms and Abbreviations

Council	Western Pacific Fishery Management Council
DMWR	American Samoa's Department of Marine and Wildlife Resources
EA	Environmental Assessment
EEZ	Exclusive Economic Zone
EFH	Essential Fish Habitat
ESA	Endangered Species Act
FEP	Fishery Ecosystem Plan
FMP	Fishery Management Plan
FR	<i>Federal Register</i>
HAPC	Habitat Areas of Particular Concern
IATTC	Inter-American Tropical Tuna Commission
ITS	Incidental Take Statement
MMPA	Marine Mammal Protection Act
MSY	Maximum Sustainable Yield
MUS	Management Unit Species
NMFS	National Marine Fisheries Service
NEPA	National Environmental Policy Act
NOAA	National Oceanic and Atmospheric Administration
PIFSC	Pacific Islands Fisheries Science Center
PIRO	Pacific Islands Regional Office
SSC	Scientific and Statistical Committee
U.S.C.	United States Code
USCG	U.S. Coast Guard
USFWS	U.S. Fish and Wildlife Service
VMS	Vessel Monitoring System
WCPFC	Western and Central Pacific Fisheries Commission
WCPO	Western and Central Pacific Ocean

1 INTRODUCTION

1.1 Background Information

The American Samoa longline fishery is managed under the Council's Fishery Ecosystem Plan for Pacific Pelagic Fisheries of the Western Pacific Region (Pelagics FEP), as amended, and associated regulations as authorized by the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act; 16 U.S.C. 1801, et seq.). The primary target species of these longline vessels is South Pacific albacore tuna (*Thunnus alalunga*), sold frozen to the fish processing industry in Pago Pago. The fishery also catches and retains other tunas and pelagic management unit species (MUS) for local sale and home consumption (Table 1). The fishery contributes to the local economy and is a source of culturally important fish for the community.

Longline fishing first occurred in American Samoa when fishermen from neighboring Samoa brought the practice over in 1995. At the time, the fishery was conducted on alia vessels. Alia are locally built vessels less than 40 feet long and are used for longline, bottomfish, troll, and coral reef fishing. When used for longline fishing, alia vessels typically make single day (between 8 to 12 hours) trips with a crew of three. During a fishing trip, the fisherman use manually powered mainline drums that hold about four miles of monofilament line and deploy around 300 hooks per trip. The alia vessels can hold approximately 2,000 pounds of albacore tuna. Fishermen keep their catch on ice while at sea and then freeze their catch on land before selling to the processing plant. By 2001, 37 longline alia vessels were actively fishing in the U.S. exclusive economic zone (EEZ) around American Samoa.

The first large longline vessel (50 ft or greater in length) arrived in 1997. After this, there was a rapid increase in number of large vessels participating in the fishery. In 1999, there were three large vessels and by 2001 there were 27 large vessels. These large vessels can travel farther from land and stay out for weeks at a time. Using a mechanically powered reel, a crew of up to seven people can set more mainline and hooks per trip (up to 30 miles of mainline and 2,000 hooks) than the average alia vessel. Most importantly, the large vessels can hold up to 90,000 pounds of catch, which is frozen onboard and then sold to the processing plant. By 2002, alia fishermen were concerned that an uncontrolled influx of large vessels could result in adverse impacts to local fish stocks and the small vessel fleet.

1.2 American Samoa Longline Limited Entry Program Implementation

In 2005, the Council recommended and NMFS implemented a limited entry program. Regulations for the American Samoa Longline Limited Entry Program are found in CFR §665.816. The program restricts (caps) the total number of permits allowed to be issued annually. Only 60 permits may be issued in a given year. Permits were issued based on length, as follows:

Class A Permits— less than or equal to 40 ft

- Class B Permits— over 40 ft to 50 ft
- Class C Permits— over 50 ft to 70 ft
- Class D Permits— over 70 ft

Permit Eligibility

Qualification for a limited access permit required an individual to submit an application and documentation to NMFS that he or she owned a vessel that was used to legally harvest and land pelagic MUS with longline gear in the U.S. EEZ around American Samoa prior to March 22, 2002. Applicants were also required to be U.S. citizens or nationals to qualify for an initial permit. Based on these criteria, the Council determined the maximum number of qualifying vessels to be 138. Of these 138 individuals, 93 individuals owned Class A size vessels, 9 owned Class B size vessels, 15 owned Class C size vessels, and 21 owned Class D size vessels (WPFMC 2003; Table 1).

Table 1. Pelagic Management Unit species.

Common Name	Scientific Name	Samoan Name
Mahimahi (dolphinfishes)	<i>Coryphaena</i> spp.	Masimasi
Wahoo	<i>Acanthocybium solandri</i>	Paala
Indo-Pacific blue marlin	<i>Makaira mazara</i>	Sa'ula
Black marlin	<i>Istiompax indica</i>	
Striped marlin	<i>Kajikia audax</i>	
Shortbill spearfish	<i>Tetrapturus angustirostris</i>	Sa'ula
Swordfish	<i>Xiphias gladius</i>	Sa'ula malie
Sailfish	<i>Istiophorus platypterus</i>	Sa'ula
Pelagic thresher shark	<i>Alopias pelagicus</i>	Malie
Bigeye thresher shark	<i>Alopias superciliosus</i>	
Common thresher shark	<i>Alopias vulpinus</i>	
Silky shark	<i>Carcharhinus falciformis</i>	
Oceanic whitetip shark	<i>Carcharhinus longimanus</i>	
Blue shark	<i>Prionace glauca</i>	
Shortfin mako shark	<i>Isurus oxyrinchus</i>	
Longfin mako shark	<i>Isurus paucus</i>	
Salmon shark	<i>Lamna ditropis</i>	
Albacore	<i>Thunnus alalunga</i>	Apakoa
Bigeye tuna	<i>Thunnus obesus</i>	Asiasi, To'uo
Yellowfin tuna	<i>Thunnus albacares</i>	
Northern bluefin tuna	<i>Thunnus thynnus</i>	
Skipjack tuna	<i>Katsuwonus pelamis</i>	Atu, Faolua, Ga'oga
Kawakawa	<i>Euthynnus affinis</i>	Atualo, Kavalau
Moonfish	<i>Lampris</i> .	Koko
Oilfish family	<i>Gempylidae</i>	Palu talatala
Pomfret	<i>Bramidae</i>	Manifi moana

During the initial permit application period in 2005 NMFS approved and issued 60 permits Table 2). There were a low number of Class A applicants for initial permits compared to the potential applicant pool in 2002 because participation in the alia fishery was already declining by 2003. Permit holders were required to register a vessel for use with the permit within 120 days. Permits are valid for three years from date of issuance and may be renewed, provided certain requirements are met.

Table 2. Maximum Number of Qualifying Vessels, Permits Issued, and Permits Available, by Vessel Class

Vessel Size Class	Maximum Number of Qualifying Vessels in 2002	Initial Permits Issued in 2005	Permits Available in 2019 ¹	Permits Issued in 2019 ²
A (40' or less)	93	22	16	4
B (40.1' – 50')	9	5	6	4
C (50.1' – 70')	15	12	12	13
D (> 70')	21	21	26	29
Total	138	60	60	50

When the program was implemented in 2005, Class A permit holders could upgrade to either Class B, C, or D permits over a four-year period (from 2006 through 2009). The number of permit upgrades reduced the number of permits available in Class A. There were six approved upgrades between 2006 and 2009, which reduced the number of Class A permits from 22 (in 2005) to 16 (current).

Permit Renewal

In order for a permit holder to renew an American Samoa longline limited access permit under current regulations the following requirements must be met:

- Class A or B permit holders are required to catch a minimum of 1,000 pounds (lb) of pelagic MUS harvested with longline gear in the U.S. EEZ around American Samoa over three consecutive calendar years.
- Class C or D permit holders are required to catch a minimum of 5,000 lb of pelagic MUS harvested with longline gear in the U.S. EEZ around American Samoa over three consecutive calendar years.

In the event that a permit holder does not make the minimum harvest within three consecutive years, the permit reverts to NMFS. When a permit reverts to NMFS, NMFS announces the availability of the permit and, from those who apply for it, issue permits to qualified applicants with the earliest documented participation in the fishery onboard a Class A vessel. The next

¹ When the program was implemented in 2005, Class A permit holders could upgrade to either Class B, C, or D permits over a four-year period (from 2006 through 2009). Of the 26 upgrade permits available for the four-year period, only six were issued, with five out of six vessels upgraded to D permits and one to a B permit. The number of permit upgrades reduced the number of permits available in Class A from 22 (in 2005) to 16 (current).

² The number of permits issued over the course of a year may exceed the total number of permits available at any given time during the year due to permit transfers. For example, there were 26 Class D permits issued for 2019 and three transfers occurred within this class, bringing the total number of permits issued to 29.

priority for an available permit is given to an individual with earliest participation in the fishery onboard a Class B, Class C, and then Class D vessel, in that order. Therefore, a history of participation in the fishery is currently required in order to be considered for permits when they are made available.

Permit Transfers

Under current regulations, people holding a Class A permit have different transfer opportunities than those holding a Class B, C, or D permit.

Class A Permit Transfers: The current regulations allow a holder of a Class A longline permit holders to transfer the permit (by sale, gift, bequest, intestate succession, barter or trade) to:

- a. A family member of the permit holder;
- b. A Western Pacific community located in American Samoa that meets the criteria under the Magnuson-Stevens Act Section 305(i)(2)(B), Community Development Program; or
- c. Any person with documented participation in the pelagic longline fishery on a Class A size vessel in the EEZ around American Samoa before March 22, 2002.

Class B, C, and D Permit Transfers: Current regulations allow holders of Class B, C and D permits to transfer their permit (by sale, gift, bequest, intestate succession, barter, or trade) to:

- a. Any person with documented participation in the pelagic longline fishery in the EEZ around American Samoa; or
- b. A Western Pacific community located in American Samoa that meets the criteria set forth under Section 305(2) of the Magnuson-Stevens Act (Community Development Program).

1.3 Current Status of the Fishery

Over time, the composition of the fleet and the individuals holding permits has changed and fluctuated (Figure 1). Since 2006, most of the alia have stopped fishing and, in 2019, there were only three active Class A and B vessels in the fleet. Participation by large vessels was somewhat stable through 2014, but has declined and remained below 20 active vessels annually since then. There were 14 active Class C and D vessels in 2019. The 17 longline vessels (all classes) that fished in 2019 took 114 trips, deployed 1,695 sets, and used 4.8 million hooks. While the number of boats increased in 2019 from 2018, the effort decreased (in trips, sets and hooks, Table 4).

Longline vessels (all classes) landed 2,976,794 lb of PMUS in 2019, with 75% of the catch comprised of albacore. Historically, only one percent of the total PMUS catch was attributed to vessels less than 50 ft in length fishing within 50 miles of shore. Furthermore, monohulls and alias differed somewhat in their catch composition. For monohulled vessels, the albacore catch was 65%, yellowfin and skipjack tuna each comprised 10%, and wahoo amounted to only 5% of the catch per set. Species composition per set for alias was also dominated by albacore (42%), but was followed by 29% yellowfin, 10% wahoo, and 8% mahimahi (Koboski 2014).

The American Samoa longline fishery is important to the local economy. In 2019, the total longline fleet revenue (estimated landed value) was \$3.9 million, and albacore composed of over

89% of the total landed value. Other main species included yellowfin, bigeye, skipjack, and wahoo.

Table 3. Number of American Samoa Longline Permits Issued and Active Vessels, 2010 - 2019. Classes A and B include alia vessels. Classes C and D include larger monohull vessels.

Year	Class A Permits	Class A Active	Class B Permits	Class B Active	Class C Permits	Class C Active	Class D Permits	Class D Active	Total Permits
2010	12	1	0	0	12	7	26	18	50
2011	12	1	1	0	12	8	27	15	52
2012	5	4	5	0	11	8	27	14	48
2013	5	1	5	0	11	7	26	14	47
2014	13	2	5	0	17	7	37	14	56
2015	7	3	5	0	12	6	34	12	58
2016	7	2	4	0	12	5	27	13	50
2017	7	1	3	0	11	5	27	9	48
2018	6	1	7	0	14	4	29	8	56
2019	4	3	4	0	13	5	29	10	50

Figure 1. Number of active longline fishing vessels in size classes A (< 40 ft.), B (40-50 feet), C (51-70 feet) and D (> 70 ft.) from 2010-2020.

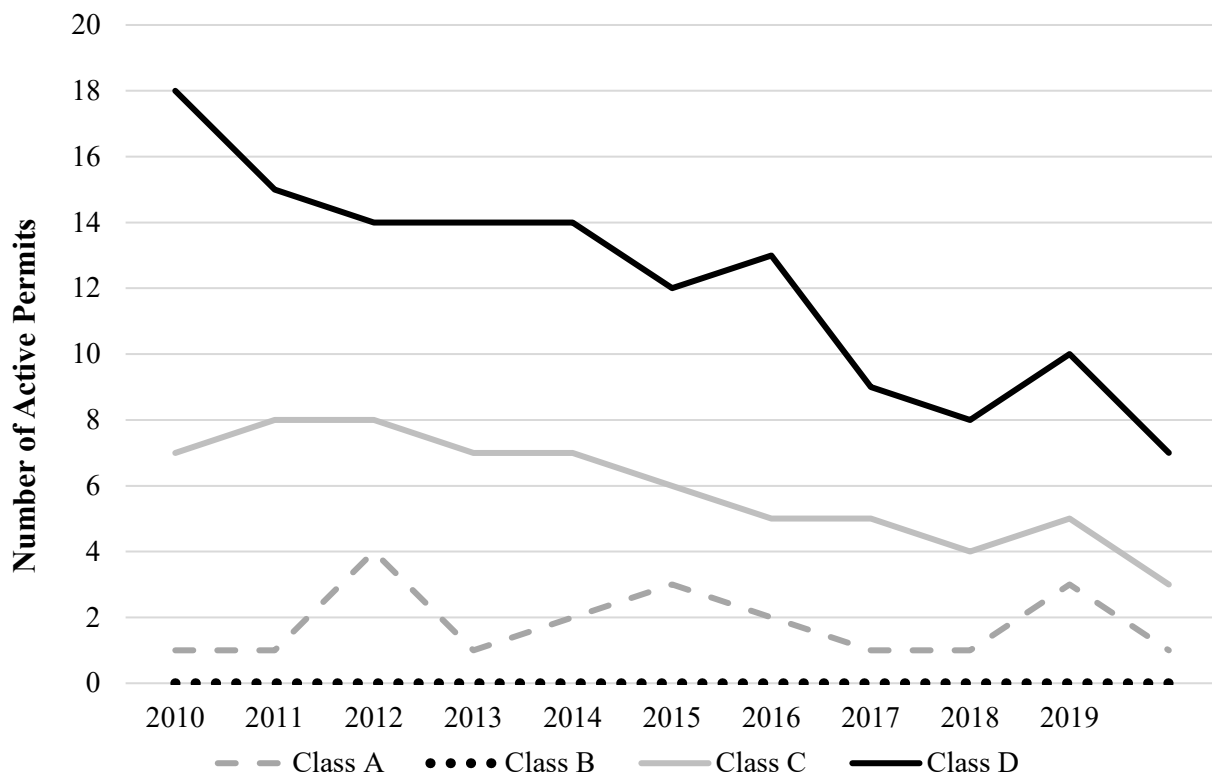


Table 4. Effort in the American Samoa longline fishery from 2015 – 2019 for all active vessels in all size classes.

Effort	2015	2016	2017	2018	2019
Boats	18	20	15	13	17
Trips	168	213	135	145	114
Sets	2,452	2,420	2,333	2,185	1,695
PMUS Landings	4,756,195	4,301,435	4,748,163	4,102,608	2,976,794

1.4 Proposed Action

NMFS proposes to approve the Council’s recommended Amendment 9 to the Pelagics FEP and modify the American Samoa longline limited entry program regulations as follows:

The proposed action includes the following changes to the limited entry program:

- a) Replace the four vessel classes with two, where Class A and B vessels would be classified as “small” vessels, and Class C and D vessels would be classified as “large” vessels;
- b) Restrict permit ownership to U.S. citizens and nationals, and eliminate the requirement to have documented history of participation to be eligible for a permit, but maintain the priority ranking system based on earliest documented history of fishing participation in vessel class size, if there is competition between two or more applicants for a permit;
- c) Require that permits can only be transferred among U.S. citizens or nationals, and eliminate the requirement for documented participation in American Samoa longline fishery to receive a transferred permit;
- d) Reduce the “small” vessel class minimum harvest requirement to 500 lb of pelagic management unit species (MUS within a 3-year period, but maintain the existing 5,000 lb harvest for the “large” vessel class;
- e) Require that the entire minimum harvest amounts for the respective vessel classes are to be landed in American Samoa within a three-year permit period, but that the minimum harvests not be required to be caught within the U.S. EEZ around American Samoa;
- f) Specify a fixed three-year permit period that is the same as the three-year period to make a minimum harvest requirement; and
- g) Require that the minimum harvest period not restart in the event of a permit transfer and that if the minimum harvest amount has not been caught at the time of transfer, the new permit owner would be required to meet the harvest requirement based on the following formula: the product of percentage of time left within the three-year permit period and the minimum harvest amount.

1.5 Purpose and Need

The purpose of the proposed action is to reduce the complexity of the American Samoa longline limited entry program and to modify the limited entry program requirements to provide for

sustained community participation in the small vessel American Samoa deep-set longline fishery. After managing the American Samoa limited entry fishery for 16 years, the Council finds there is a need to modify the program to meet the program objectives, specifically to reduce barriers to participation by small and medium sized vessel (i.e., vessel less than 50 ft) and to maintain small and medium vessel participation in the American Samoa limited entry longline fishery. NMFS also needs to update the regulations to remove outdated, unnecessary provisions and, in some cases, to update portions of the fishery management regulations in other sections that refer to particular permits.

The proposed action will not change the original fishery management objectives of the American Samoa longline limited entry permit program. The objectives of the program are to: 1) prevent local depletion, 2) maintain sustained community participation in the fishery, 3) ensure opportunities for participation by indigenous American Samoans, 4) reduce gear conflicts, and 5) minimize fish bycatch.

1.6 Action Area

The action area is the area of operation of the American Samoa-based longline fishery. The action area for this EA includes the U.S. EEZ around American Samoa, as well as distant high seas waters south of the Equator that are fished by vessels holding a valid longline permit. In recent years, the fishery has mostly been operating in the area between 175°- 165° W and 10°- 15° S (Figure 2). We focus on this area because the proposed changes are intended to promote participation in the small vessel locally based longline fishery from American Samoa. Although the proposed changes to the American Samoa Limited Entry Program could affect dual permit holders that also fish in the Hawaii-based deep-set longline fishery, the changes are not expected to change fishing in any substantial manner. This is because the change in vessel classes and the eligibility requirements are administrative changes and the changes to the minimum harvest requirement will not apply to large vessels. Additionally, removing the requirement for the catch to be harvested within the EEZ around American Samoa will reduce dual-permitted vessel traffic between Hawaii and American Samoa. Lastly, dual permit holders have such a long and established history in the fishery that even if a dual-permitted vessel owner did not meet all the permit requirements and lost their permit, they would be able to apply for and likely be the top applicant for any available permit. Therefore, the main focus of this EA will be on the American Samoa-based deep-set longline fishery.

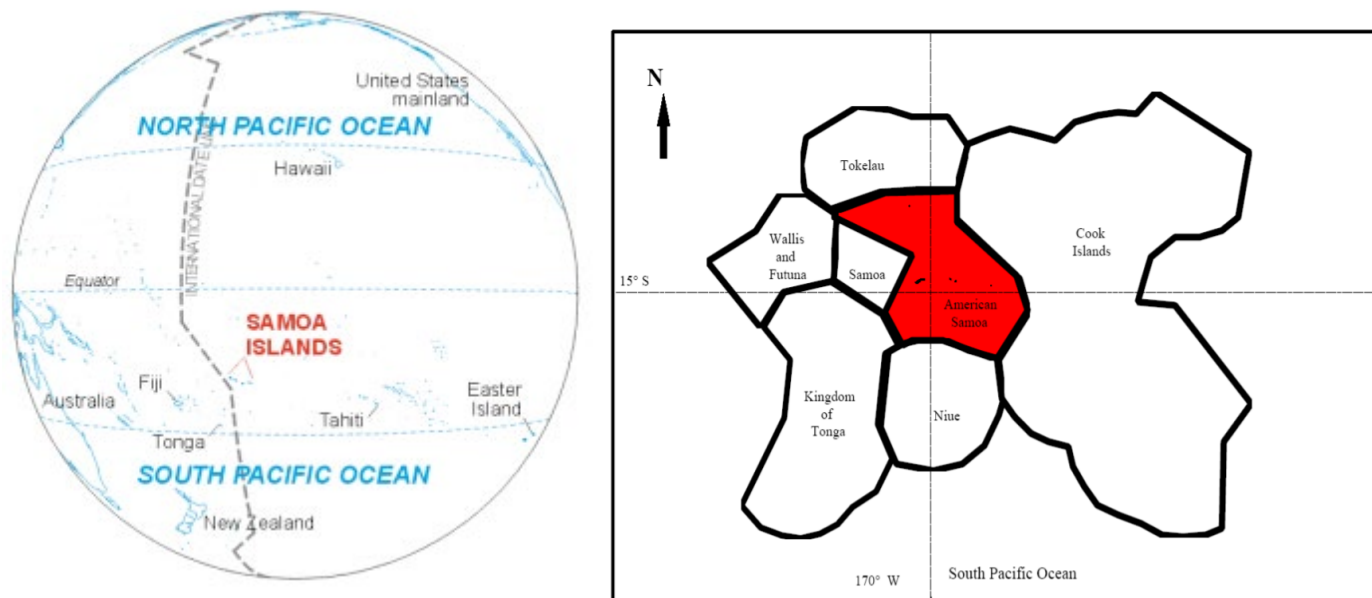


Figure 2. Map showing the U.S. EEZ boundaries around American Samoa (Levine & Allen, 2009) as well as adjacent EEZ boundaries of neighboring countries.

1.7 Decisions to be Made

This document will support a decision by the Regional Administrator (RA) of the NMFS Pacific Island Region, on behalf of the Secretary of Commerce, whether to approve, disapprove, or partially approve the Council's recommendation. The RA will also use the information in this EA to make a determination about whether the proposed action would constitute a major Federal action that has the potential to significantly affect the quality of the human environment. If NMFS determines the action would not significantly affect the quality of the human environment, NMFS will prepare a Finding of No Significant Impact (FONSI). If NMFS determines the proposed action is a major Federal action that would significantly affect the quality of the human environment, NMFS would prepare an environmental impact statement before approving the Amendment or modifying the regulations.

1.8 Coordination with the Public and Others

The proposed action was coordinated with the public and other agencies with an interest in or affected by the proposed program modification. The Council includes representation by various Federal and local government agencies. The development of the proposed action occurred in public meetings of Advisory Panels, the Science and Statistical Committee (SSC), and the Council. In addition, the Council provided notice of the proposed action in local media releases, newsletter articles, and on the Council's website at <http://www.wpcouncil.org>. In addition to NOAA, agencies that participate in the deliberations of the Council specifically include American Samoa Department of Marine and Wildlife Resources (DMWR), U.S. Coast Guard (USCG), U.S. Fish and Wildlife Service (USFWS), and U.S. Department of State, among others.

NMFS and the Council will be soliciting public comment on the proposed action and environmental effects analysis described in this draft EA. Instructions on how to comment on the proposed specification can be found by searching for RIN 0648-BH65 at www.regulations.gov, or by contacting the Responsible Official or Council Executive Director listed NMFS must receive comments by the deadline specified in the proposed rule in order for the comments to be considered.

1.9 List of Preparers and Reviewers

Preparers:

- Kate Taylor – Fishery Management Specialist, PIRO Sustainable Fisheries Division (SFD)

Reviewers:

- Phyllis Ha, Resource Management Specialist, PIRO SFD
- Ariel Jacobs, NEPA Coordinator, PIRO
- Jarad Makaiau, Fish and Wildlife Administrator, PIRO SFD

2 DESCRIPTION OF ALTERNATIVES CONSIDERED

2.1 Development of Alternatives

At its 170th Meeting on June 21st, 2017, the Council reviewed and discussed options to modify the American Samoa longline fishery limited entry program under three topic areas: vessel size class, permit eligibility, and minimum harvest requirements. All other existing provisions of the American Samoa longline limited entry program set forth in the regulations at 50 CFR 665.816 will be maintained and were not discussed.

Topic 1: Vessel Size Classes

This topic addresses the Council’s objective to reduce the complexity of the limited entry program. The Council discussed various options, including:

- Removing the vessel class sizes, or;
- Modifying the four-class system into three, whereby Class A and B (less than 50 ft), would be combined and the two vessel size classes for large vessels, Class C and D would be maintained, or;
- Modifying the four-class system into two by combining Class A and B and Class C and D in small and large vessel classes, respectively.

After discussion in public meetings, the Council recommended changing the four-class system into two classes, whereby Class A and B vessels (less than 50 ft) would be considered “small” and Class C and D vessels (equal to or greater than 50 ft) would be considered “large.” The small-scale longline fishery in American Samoa can be characterized as those vessels which have a limited crew, use manually powered mainline drums to haul in catch, and do not have

freezers on board. This description would apply to all vessels under 50 ft in length. American Samoa longline vessels >50ft in length were previously characterized and commonly referred to as “large” after the creation of the Large Vessel Prohibited Area which excluded large vessels (defined as greater than 50 ft) from pelagic fishing within 50 nm of American Samoa (67 FR 4369, January 30, 2002). It was then common following the creation of the LVPA to actually refer to vessels less than 50 ft in length as “small”.

Topic 2: Eligibility Criteria

This topic addresses both of the Council’s objectives: to provide for sustained community participation in the small vessel longline fleet, and to reduce the complexity of the limited entry program.

The initial process to issue American Samoa longline permits in 2005 included the requirements that:

- An applicant provide official documentation that indicated they owned a vessel that landed pelagic MUS caught from the U.S. EEZ around American Samoa prior to March 22, 2002, or;
- An applicant had to notify NMFS by March 22, 2002 of their intention to own a vessel and land fish by June 28, 2002); and
- Required permit holders be U.S. citizens or nationals (50 CFR 665.816(e)).

The American Samoa longline limited entry program is the only western Pacific Federal fishing permit that required initial permit holders to be U.S. citizens or nationals. After the initial permit issuance period in 2005, however, the U.S. citizenship or U.S. national status no longer applied either for applicants or to receive a permit through transfer. The regulations currently state that American Samoa longline limited access permits that are not renewed become available to applicants that show documented history in the longline fishery. Under the current regulations an applicant for an available permit that has the earliest documented participation in the longline fishery in the U.S. EEZ around American Samoa on a Class A vessel has first priority for an available permit. The next priority are persons with the earliest documented participation in the longline fishery on a Class B, Class C, or Class D size vessel, in that order. In the event of a tie in the priority ranking between two or more applicants, NMFS awards permits based on who has the earliest participation on a second trip. If there is still a tie, then permits are awarded by an impartial lottery (50 CFR 665.816(g)(1)).

The Council considered that there are currently two different provisions for permit transfers:

Class A permits can only be transferred by sale, gift, bequest, intestate succession, barter, or trade to:

- A family member of the permit holder,
- A western Pacific community located in American Samoa that meets the criteria in section 305(i)(2)(B) of the Magnuson-Stevens Act, or
- Any person with documented participation in the pelagic longline fishery on a Class A size vessel in the U.S. EEZ around American Samoa prior to March 22, 2002 (50 CFR 665.816(i)(2)).

Class B, C, or D permits can only be transferred by sale, gift, bequest, intestate succession, barter, or trade to:

- Any person with documented participation in the pelagic longline in the U.S. EEZ around American Samoa; or
- A Western Pacific community located in American Samoa that meets the criteria in Section 305(i)(2)(B) of the Magnuson-Stevens Act.

During discussions, the Council considered several options related to potential changes in permit eligibility involving documented past history in the fishery, citizenship requirements, and variations of these requirements within existing vessel classes. In addition, the Council considered options associated with eligibility criteria for permit transfers.

Topic 3: Minimum Harvest Requirements

This topic addresses the Council's objective to provide for sustained community participation in the small vessel longline fleet. If a permit holder does not meet the minimum harvest requirements, the permit holder forfeits the permit and NMFS provides notice of the available permit. The intention of minimum harvest requirement is to prevent permits from not being used and to promote new entry into the fishery.

The current minimum harvest requirement for Class A and B permit holders is 1,000 lb of pelagic MUS (landed in American Samoa) harvested over a 3-year period within the U.S. EEZ around American Samoa. For Class C and D permit holders, the minimum harvest requirement is 5,000 lb of pelagic MUS (landed in American Samoa) harvested over a 3-year period within the U.S. EEZ around American Samoa. The intention of a minimum harvest requirement was to ensure active participation by permit holders.

For the preferred alternative, the Council considered reducing the landings requirement for the small vessel classes as well as an option to remove all landings requirements within the longline program. The Council chose to reduce the minimum three-year landings requirement from 1,000 to 500 lb for small vessel permits (Class A and B), but chose to leave the existing minimum harvest requirement (5,000 lb) for large vessel permits (Class C and D). The Council also chose to remove the requirement for harvesting minimum harvest within the U.S. EEZ around American Samoa.

The Council specified a fixed three-year permit period that is the same as the three-year period to make a minimum harvest requirement. Further, the Council required that the minimum harvest period not restart in the event of a permit transfer. If the current permit holder has not met the minimum harvest requirement at the time of transfer, the new permit owner would be required to meet the landings requirement based on the following formula:

- Remaining harvest amount = product of percentage of time left within the three-year permit period and the minimum harvest amount.

For example, the original permit holder, Person A, has 1.5 years left on the three-year permit (50% of the total time) at the time of transfer to Person B. Person A has harvested 300 lb of the

500 lb (new) minimum harvest amount. Under this provision, the minimum harvest amount applied to Person B at time of transfer is computed as:

$$50 \text{ percent or } (0.5) \times 500 \text{ lb} = 250 \text{ lb}$$

Therefore, Person B would need to catch 250 lb within the remaining 1.5 years. The catch required by Person B is independent from the amount Person A caught.

If Person A transferred the permit to Person B with only 6 months left on the permit (20% of the total time), then the minimum harvest amount applied to Person B at the time of transfer is computed as:

$$20 \text{ percent or } (0.2) \times 500 \text{ lb} = 100 \text{ lb}$$

Person B would only need to catch 100 lb of PMUS before the permit expires in order to be eligible to renew the permit.

2.2 Management Alternatives

2.2.1 Alternative 1: No Action / Status Quo

Under Alternative 1, NMFS and the Council would not modify the permitting provisions of the American Samoa limited entry longline fishery.

Vessel Class Size. Under Alternative 1, four vessel class sizes would be maintained in the American Samoa limited entry program. The breakdown of permit class sizes by vessel length is specified in Section 1.2.

Eligibility Criteria. Under Alternative 1, and because the initial permit issuance period is over, eligibility for an available permit requires only documented participation in the longline fishery, with no requirement to be a U.S. citizen or national. At the time of writing, it is believed that all existing permit holders are US citizens or nationals. Only the initial permit issuance in 2005 required applicants to be U.S. citizens or nationals. In the case of Class A permits, the documented history must be prior to March 22, 2002. Additionally, any permit could be transferred to a western Pacific community located in American Samoa, as defined in the FEP and, in the case of Class A permits, a permit may be transferred to a family member of the permit holder.

Permit priority ranking for available permits would be maintained, with permit applicants being ranked based on their earliest participation in the fishery onboard a Class A vessel. The next priority for available permits is given to an individual with earliest participation in the fishery onboard a Class B, Class C, and then Class D vessel, in that order. A tie would be broken by the person with the second earliest participation in the fishery, and subsequently, if that resulted in a tie as well, the tie would be broken by an impartial lottery.

Minimum Harvest Requirements: Under Alternative 1, the requirements for Class A and Class B vessels to land in American Samoa 1,000 lb and Class C and Class D vessels to land 5,000 lb of pelagic MUS over three consecutive years in order to renew their permit would be maintained.

In the event that a permit holder does not make the minimum harvest within three consecutive years, the permit reverts to NMFS. NMFS may then announce the availability of permits and issue permits to qualified applicants as described above. Each time a permit is transferred, the consecutive three-year period used for measuring the vessel's progress towards the minimum harvest requirement starts anew.

Expected Fishery Outcome

Under the No-action Alternative, there would be no changes to the limited entry program and therefore no new impacts to fishers or the fishing community of American Samoa. The eligibility requirements of the no-action alternative could continue to hinder entry into the longline fishery by members of the indigenous communities of American Samoa by requiring those interested in entering the longline fishery when a permit becomes available to have documented participation in the fishery, with an available permit going to the applicant with the earliest documented participation in the fishery. An average class A vessel lands 233 lb per trip and takes 59 trips annually and a Class C vessel lands 39,710 lb per trip and take 6 trips annually. Maintaining minimum harvest requirements of 1,000 lb (Classes A and B) and 5,000 lb (Classes C and D) could result in some participants being unable to renew their permits, although American-Samoa-based vessels are expected to easily meet the current minimum harvest requirement.

2.2.2 Alternative 2: Modify the American Samoa Longline Limited Entry Permit Program (Council Preferred)

Vessel Class Size: Under Alternative 2, the four vessel size classes would be replaced with two vessel class sizes with Class A and B vessels (less than 50 ft) classified as “small” and Class C and D vessels (equal to or greater than 50 ft) classified as “large.” All current permit holders would have their permits modified into one of the two class sizes. The number of small vessel permits would remain equal to the current number of potential Class A and B permits and the number of large vessel permits would remain equal to the current number of potential Class C and D permits. The total number of permits would not exceed 60. The permit issued date and permit expiration date would not be modified.

Eligibility Criteria: Under Alternative 2, permit eligibility would be limited to U.S. citizens and nationals, with no other qualifying criteria (i.e., documented history in the fishery would no longer be required). If there were competition between applicants for one permit, the priority ranking system to award permits within the small and large vessel class sizes based on earliest documented participation in the fishery from smallest to largest vessels in the former Class A through D sizes would remain the same as described under Alternative 1.³ If there is a tie among two or more applicants, NMFS would issue permits based on a fair and impartial lottery system.

³ Despite documented history in the fishery no longer being required under Alternative 2, NMFS would still maintain records of participation in the fishery and therefore would be able to implement the priority ranking system based on documented participation in the fishery when more than one applicant is interested in a permit.

As under the no-action alternative, a permit could be transferred to a western Pacific community located in American Samoa, as defined in the FEP.

Minimum Harvest Requirements: Under Alternative 2, the three-year minimum pelagic MUS harvest requirement for small vessels (previously Class A and B) would be reduced from 1,000 lb to 500 lb, but catch would still need to be landed in American Samoa. The three-year minimum harvest requirement for large vessels (previously Class C and D) would remain at 5,000 lb. While the minimum harvest amount must be landed in American Samoa, there would be no requirement for fishermen to harvest their catch within the U.S. EEZ around American Samoa. Further, the minimum harvest period would not restart in the event of a permit transfer. The new permit owner would be required to meet the harvest requirement based on the following formula: the product of percentage of time left within the three-year permit period and the minimum harvest amount. The amount of minimum harvest is independent from the amount of harvest made by the original permit holder and is a function of time remaining on the permit.

Expected Fishery Outcome

The current Class A and B permitted vessels would be issued new “small” vessel permits. The current Class C and D permitted vessels would be issued “large” vessel permits. Additionally, the latent permits in each permit class would automatically transfer to their respective new permit category. The eligibility requirements under Alternative 2 would only limit permits to U.S. citizens and nationals and applicants interested in a permit would not need to show documented history in the fishery, except in the instance when more than one applicant is interested in an available permits. Reducing the minimum harvest requirements could allow some Class A and B permit holders to renew their permits when they otherwise would have to forfeit them. An average class A vessel lands 233 lb per trip and takes 59 trips annually. Therefore, similar to Alternative 1, it is expected that small vessels can meet the proposed minimum harvest requirement over a three year period. Additionally, if the minimum harvest requirement remains at 1,000 lb this could deter any potential new entrants due to the removal of the requirement for documented history in the fishery in order to obtain a permit.

2.3 Alternatives Considered but Not Analyzed in Detail

Vessel Size Categories

Combining all vessel size classes into a single limited-entry permit, with 60 available permits, was discussed but not considered as an option in deliberations of the Council because it would not be consistent with the objective of increasing the amount of small vessels in the fishery. The ability for new small vessel entrants into this market would potentially become more difficult as permits could end up on larger, more efficient, and potentially more-profitable vessels.

The Council also discussed combining the vessel classes into three categories in which Classes A and B are combined (21 permits) and Classes C and D are left separate (12 and 27 permits, respectively). The Council did not explore this option further because one of the Council’s objectives of this action is to increase the ease of participation in the fishery by making the limited-entry program less complicated. Maintaining two classes and combining the other two to create three vessel class sizes was felt to be almost as complicated as maintaining four class

sizes. We agree with the Council and do not analyze the removal of all size classes or the creation of three size classes.

Reopen initial permit process with new control date set after March 2002

The Council considered reopening the original permit application process. In the application periods for available permits in 2009, the most demand for permits were for large vessel Classes C and D. The Council discussed that if the permit issuance process were reopened with changes to the status quo, the Council would need to consider a new control date from the existing control date of March 2002. The Council chose not to carry this forward, however, as the small vessel fleet was already waning after 2002, and the large vessel fishery was stable or increasing between 2002 and 2005. A new control date after March 2002 would likely allow for more large vessels in the fishery, which is not consistent with the objective of increasing the amount of small vessels in the fishery. We agree with the Council and do not analyze the reopening of the permit application process.

Table 5. Comparison of alternatives.

Topic	Alternative 1 (Status Quo)	Alternative 2 (Preferred Alternative)
Basic Description:	Continue the American Samoa Longline Limited Entry Program with no changes: maintain 4 permit vessel size-classes; maintain current minimum harvest and history requirements; and do not require U.S. citizenship or national status for available permits or permit transfers.	Modify the American Samoa Limited-entry longline fishery management program: Consolidate permits into 2 size-classes; modify minimum harvest amounts and requirements for transferred permits; remove prior history requirement; and require U.S. citizenship/or national status. Set duration of permit to match the 3-year minimum landings period.
Total number of permits available	60	60
Number of vessel size classes	4 permit classes based on vessel size	2 permit classes based on vessel size:
Vessel size classes and number of permits	Class A (≤ 40 ft): 16 permits Class B (40.1 ft – 50 ft): 5 permits Class C (50.1 ft – 70 ft): 12 permits Class D (≥ 70 ft): 27 permits	Small (< 50 feet): 21 permits Large (≥ 50 ft): 39 permits
U.S. Citizenship or U.S. National status Fishery Participation (History)	Not required when applying for available permits in 2005. Not required for permit transfers.	Required for all permits (including all renewals and transfers).
Fishery Participation (History)	Documented history of fishery participation is required to be eligible permit (except for CDP Program or family member transfer (Class A only)). Documented history is used to evaluate applicants in a tie for newly available permits.	Documented history of fishery participation <i>not</i> required. Documented history <i>would be</i> used to rank applicants competing for newly available permits.

Minimum Harvest Requirement (Small Vessels)	<p>Smaller vessels: (Class A and B):</p> <p>1,000 lb of Pelagic MUS (PMUS) landed in American Samoa within three years of permit issuance. Landings required to be harvested within U.S. EEZ around American Samoa.</p>	<p>Small vessels (<50 ft):</p> <p>500 lb of PMUS landed in American Samoa within 3 years of permit issuance. Landings not required to be harvested within U.S. EEZ around American Samoa. If permit is transferred, minimum landing requirement is prorated.</p>
Minimum Harvest Requirement (Large Vessels)	<p>Larger vessels: (Class C and D):</p> <p>5,000 lb PMUS landed in American Samoa within 3 years of permit issuance.</p>	<p>Large vessels (≥50 ft):</p> <p>5,000 lb of PMUS landed in American Samoa within 3 years of permit issuance. Landings not required to be harvested within U.S. EEZ around American Samoa. If permit is transferred, minimum landing requirement is prorated.</p>
Transfers	<p>Class A Longline Permit holder could transfer permit (by sale, gift, bequest, intestate succession, barter or trade to):</p> <ol style="list-style-type: none"> A family member of the permit holder; A Western Pacific community or; Any person with documented participation on a Class A size vessel in the EEZ around American Samoa before March 22, 2002. <p>Class B, C, and D Longline Permit holder could transfer permit (by sale, gift, bequest, intestate succession, barter or trade to):</p> <ol style="list-style-type: none"> Any person with documented participation on a Class A size vessel in the EEZ around American Samoa before March 22, 2002; or A Western Pacific community 	<p>All vessels:</p> <p>Permits could be transferred to any U.S. citizen or U.S. national. Permits could be transferred to a Western Pacific community. History would be used to rank applicants under a competition for limited permits.</p>
Outcome: NMFS Administrative Requirements	NMFS tracks permits, evaluates eligibility, conducts evaluations of competing interests for permits, and issues permits.	Same as Alternative 1
Outcome: Likely ease of complying with requirements:	Class A and B: Minimum harvest requirement could hinder ability to maintain permit.	<p>Small vessels: Minimum harvest requirement would be easier to fulfill.</p> <p>Reduced complexity in the regulations.</p>

3 DESCRIPTION OF THE AFFECTED ENVIRONMENT

This section describes the affected fishery and fishery resources, other biological and physical resources, and potential effects implementing the alternatives would have on these resources. Climate change and environmental justice are considered, along with potential impacts to fishing communities, special marine areas and other resources, and fishery administration and enforcement.

3.1 Brief History of American Samoa

American Samoa is an unincorporated and unorganized territory of the United States located in the central South Pacific Ocean. It is the only U.S. territory in the southern hemisphere. The Council and NMFS, under the Magnuson-Stevens Act, formally designated American Samoa as a fishing community on April 19, 1999 (64 FR 19067). However, local dependence on fishing goes back approximately 3,500 years to when the islands of the Samoan archipelago were first inhabited (Sabater and Carroll 2009; Severance and Franco 1989).

The 1899 Tripartite Convention divided the Samoan Archipelago between the U.S. and Germany, with the 199 km² (~ 77 mi²) of land on the islands of Tutuila, Aunuu, Ofu, Olosega, Tau, Swains, and Rose Atoll in the east coming under U.S. control. A year later, the U.S. and local chiefs signed a Deed of Cession to formally declare American Samoa a U.S. territory.

The U.S. and other powers prized the deepwater harbor at Pago Pago for its strategic and commercial value. Following World War I, the League of Nations granted New Zealand the responsibility to administer German or “Western” Samoa. In 1962, Western Samoa was granted independence and the country changed its name to Samoa in 1997 (it is also referred to as Independent Samoa). However, the demarcation between Samoa and American Samoa is largely political; many families are cross-related and there is much cultural and commercial exchange between the two. American Samoa, with a population of about 60,000, is about 90 percent indigenous Samoan (AS DOC, 2016) who are descended from the aboriginal people who occupied the archipelago and exercised local sovereignty for millennia.

The small economy in American Samoa continues to develop. Its two most important sectors are the American Samoa Government, which receives income and capital subsidies from the U.S. Government, and tuna canning (BOH 1997). Private businesses and commerce comprise a smaller third sector. Unlike some of its South Pacific neighbors, American Samoa has never had a robust tourist industry.

3.2 U.S. Exclusive Economic Zone

The United States’ EEZ around American Samoa comprises 118,438 square nautical miles (406,750 square kilometers). The U.S. EEZ waters around American Samoa are truncated by the EEZs of other nearby island nations (Cook Islands, Tokelau, Samoa, Tonga, and Niue; Figure 2). Waters managed by the Council and NMFS in the U.S. EEZ here can generally extend anywhere from 3 nm to the full extent of the 200 nm EEZ. The islands of American Samoa are in an area of modest oceanic productivity relative to areas to the north and northwest. There are several

offshore banks located within the US EEZ around American Samoa. Some of these banks are relatively shallow, reaching to within 40 m of the ocean surface (e.g., South Bank).

Federal regulations prohibit fishing within the Large Vessel Prohibited Area (LVPA) for vessels greater than 50 feet in length (generally within 50 nm of emergent lands) and commercial fishing within marine national monuments. During the peak of longline landings in 2002, NMFS created the LVPA to prevent the potential for gear conflicts and catch competition between larger and smaller vessels, as well as to preserve opportunities for fishing by alia vessels (NOAA 2017). In 2016, NMFS published an exemption to the LVPA rule to allow large U.S. vessels holding a Federal American Samoa longline limited entry permit to fish in portions of the LVPA (seaward of 12 nm around Swains Island, Tutuila, and the Manua Islands). The American Samoa government challenged the rulemaking, claiming the U.S. Government's action violated the "other applicable law" provision of the MSA by failing to consider the Deeds of Cession, which calls for the protection of cultural and property rights. In 2017, the U.S. District Court vacated the rule and NMFS removed the LVPA exemption. In 2020, the 9th Circuit Court of Appeals found in favor of NMFS. The U.S. Supreme Court denied the American Samoa Government's petition for certiorari in June 2021. Rulemaking is currently pending to reinstate the LVPA exemption. If reinstated, large longline vessels would be able to fish in certain areas of the LVPA.

3.3 Management Setting

The American Samoa longline fishery is managed by the Council and NMFS in accordance with provisions of the Pelagic FEP (WPFMC 2009), as amended. Prior to 1985, only commercial landings were monitored. In 1996, in response to the developing longline fishery, a Federal longline logbook and permit system was implemented by NMFS. Currently, fishery participants must comply with a suite of fishing regulations intended to ensure the fishery is sustainably managed, and that it operates in compliance with applicable laws including the ESA and MMPA. These requirements include permits; logbooks; Class size B, C, and D vessels must carry vessel monitoring systems; accommodate NOAA-assigned observers, and comply with gear requirements, gear-deployment requirements, and requirements for reducing interactions and the severity of interactions with protected species. In addition, the fishery is also subject to conservation and management measures agreed to by the Western and Central Pacific Fisheries Commission (WCPFC) and implemented by NMFS at 50 CFR 300.

NOAA's Office of Law Enforcement conducts enforcement of Federal fishery regulations and provisions of the ESA and MMPA. The USCG also conducts, monitors, and enforces Magnuson-Stevens Act regulations along with a long list of other statutes applicable to fishing operations. Magnuson-Stevens Act, ESA, and MMPA-related enforcement cases are prosecuted by NOAA's Office of General Counsel.

3.4 Overview of the American Samoa-Based Longline Fishery

The longline fishery based in American Samoa is a limited entry fishery with a maximum of 60 vessels under the Federal permit program. Vessels range in size from under 40 to over 70 ft. long. The American Samoa longline fishery targets South Pacific Albacore using deep-set gear that fishes at depths of greater than 100 m and operates in the pelagic ecosystem of the South

Pacific Ocean. Smaller vessels (Class A vessels) may fish at shallower depths, as they are excluded from regulations that require hooks be set to fish at a depth greater than 100 m. The fishery encompasses an approximate area between 180°- 125° W and 17°- 45° N, including the U.S. EEZ around American Samoa and high seas to the south of the Equator (Figure 2). The fishery experiences variable success from one year to the next, and generally has its best levels and rates of catch between May to July, although the fishing season can extend through November. Albacore catch and catch per unit effort, however, notably drop during other parts of the year, and it becomes difficult for the fishery participants to cover their expenses during this off-season.

3.4.1 Fishery Participants

The number of active American Samoa longline fishery vessels in all classes has declined over the last twenty years but the largest decrease has occurred with the Class A vessels (Table 6). From 2000 – 2004, before the longline program was implemented, there was an average of 22 alia vessels actively fishing annually. After the limited entry program was implemented, the number of alia actively fishing declined to an average of 10 vessels annually from 2005 – 2009 and then further declined to an average of 2 vessels annually from 2010 – 2019. While there continues to be a limited number of Class B permits issued, no Class B vessel has landed fish since 2005 when the limited entry program was implemented. The decrease in participation by smaller vessels over time has been attributed to competition with larger Class C and D vessels (Koboski 2014). Class C and D vessels each saw a smaller reduction of 4 and 2 actively fishing vessels annually, respectively, between the time periods of 2000 - 2004 and 2010 – 2019.

In recent years (2010 – 2019), an average Class A vessel takes 51 one-day trips per year and lands 244 pounds per trip. In contrast, an average Class D vessel takes 53 trips per year, with trips lasting 63 days, and lands 90,829 pounds per trip. For Class C and D vessels, since the limited entry program was implemented, the average catch per trip, average number of sets per trip, and the average length of a trip annually has increased while the average number of trips taken annually has decreased due to the longer length of each trip. In contrast, for Class A vessels, all metrics have decreased over time since the limited entry program was implemented.

Table 6. A comparison of fishing effort and catch by vessel class between 2000-2004, 2005-2009, and 2010-2019.

		Average # Active Vessels	Total Trips Annually	Average # of Trips / Vessel	Total Pounds Annually	Average Catch / Trip (in pounds)	Total # Sets Annually	Average # Sets / Trip	Average Trip Length (in days)
Class A	2000 - 2004	22	1,210	55	577,273	477	1,425	1	1
	2005-2009	10	158	16	77,802	492	182	1	1
	2010 - 2019	2	103	51	25,123	244	103	1	1
Class B	2001 - 2005*	3	52	17	321,916	6,191	251	5	8
	2006 - 2019	No Class B vessels were active from 2006 - 2019							
Class C	2000 - 2004	10	116	11	2,477,090	21,391	1,193	10	14
	2005-2009	8	68	8	2,744,103	40,593	1,377	20	30
	2010 - 2019	6	39	7	1,548,699	39,710	849	22	36
Class D	2000 - 2004	15	106	7	5,885,090	50,703	2,265	21	21
	2005-2009	18	105	6	8,613,309	82,065	3,378	32	46
	2010 - 2019	13	53	4	4,813,961	90,829	2,148	41	63

**no Class B vessels fished in 2000 or after 2005, so the five year period of 2001 – 2005 was used for comparison purposes.*

3.5 Fishing Communities

In 1999, the Council identified American Samoa as a Fishing Community. The Secretary of Commerce approved this definition on April 19, 1999 (64 FR 19067). The Magnuson-Stevens Act defines a fishing community as “...a community that is substantially dependent upon or substantially engaged in the harvest or processing of fishery resources to meet social and economic needs, and includes fishing vessel owners, operators, and crew, and fish processors that are based in such communities” (16 U.S.C. § 1802(16)). NMFS has further defined a fishing community in the National Standard (NS) guidelines as “...a social or economic group whose members reside in a specific location and share a common dependency on commercial, recreational, or subsistence fishing or on directly related fisheries dependent services and industries (for example, boatyards, ice suppliers, tackle shops).” National Standard 8 of the Magnuson-Stevens Act requires that conservation and management measures, consistent with the conservation requirements of the act (including the prevention of overfishing and the rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities to provide for the sustained participation of such communities and to the extent practicable, minimize adverse economic effects to such communities.

3.6 Cultural Fishing

Ethnographic research conducted within the last 30 years has recognized the ongoing social and cultural importance of fishing and seafood availability to American Samoan life. The importance of practicing cultural fishing is not unique to American Samoa. Other indigenous island communities throughout the Pacific have a high regard for fishermen and the important role they play in socio-cultural fabric of Pacific Island life. Women’s fisheries have also been recognized as a key source of community food security. Fisheries sustained human habitation on Pacific Islands for several millennia, supporting the development of various island-based cultures. Thus, people generally link fishing to Pacific Island culture.

“Cultural fishing” is a relatively new term and is not yet readily defined. It is widely held that cultures and societies change and evolve but also maintain central core values. As with other studies of culture, “cultural fishing” is context dependent – definitions from other areas may not be suitable for American Samoa. American Samoa culture is often framed in terms of *Fa’a Samoa*, or the “Samoan Way” which govern local social norms and practices. This includes core values and practices such as *Tautua* or “service” which involves the broad collective sharing of labor, resources, income, and social and political support to strengthen the *Aiga* (family groups), the village, and the role of chiefs in perpetuating *Fa’a Samoa*. In a fisheries context this may mean the distribution of catch within the *Aiga*, or the use of fish at specific ceremonial events. Cultural fishing would also encompass the day-to-day practices of subsistence. These values and practices endure in spite of significant technological change.

There are several aspects that help to describe American Samoa cultural fishing, including: 1) what motivations are associated cultural fishing; 2) who can participate in cultural fishing; 3) what methods, boats and gear types can be included in cultural fishing practices; 4) what species of fish are caught, when and where they are caught for cultural fishing; and 5) what are the rules and processes involved in the management of cultural fishing. Some of these aspects may matter more than others, and so each should be examined in light of how it contributes to the practice of

Fa'a Samoa in the context of American Samoa. According to McGoodwin (2001), within small-scale fishing communities in developing countries, the best management policy may be one that affords reasonable access to all community members, regardless of their motivations for fishing (McGoodwin, James. 2001).

Public hearings focused on cultural fishing in American Samoa in 2017 found a wide range of fishing activities that can involve cultural fishing. Some general themes in relation to cultural fishing that were identified include: a) shared catch with the community in the form of *Tautua* in perpetuation of *Fa'a Samoa*, b) motivation for cultural fishing being linked to community service rather than profits, c) cultural fishing includes commercial fishing to pay for expenses associated with fishing, d) the offshore banks are important for alia vessels and other small vessels trolling and bottomfishing, e) fishing gear does not have to be limited to traditional methods and can include modern gear including longline fishing, and f) not just indigenous Samoans engage in cultural fishing.

Henry Sesepasara, the previous American Samoa Department of Marine and Wildlife Resources Director, provided remarks to the Council regarding cultural fishing that included a description noting that cultural fishing involves traditional fishing techniques and the distribution of the catch to chiefs and extended families within the village. He recognized that modern gear and commercial fishing entered American Samoa fisheries in the 1970s, and acknowledged that indigenous fishermen sell around 20% of the catch to recover funds for the next trip, but distributed around 80% of their catch to the village. He further stated that defining cultural fishing is not easy and there is a need to take into account earlier activities and new methods and gear now utilized and further that cultural fishing is not looking at a big profit, but provides food security for the community.

The NMFS Pacific Islands Fisheries Science Center (PIFSC) conducted research in 2017 and interviewed alia fishermen, longline fishermen, government officials, and other stakeholders on the ways their fishing contributes to *Fa'a Samoa*. Overall, the researchers found that both the American Samoa alia and monohull longline fisheries primarily contribute to cultural needs through distribution of catch, but that perceptions of motivations for fishing affected the way that fishermen thought about each other's cultural contributions. The interviewees described similar relationships between culture and their fishing, including the following themes:

- Giving fish and helping others is core to *Fa'a Samoa*
- Fishing with modern boats and gear can still be cultural.
- They must sell fish to keep fishing for cultural purposes.

Kleiber and Leong developed a schematic conceptual model looking at different factors of the cultural fishing considerations important for understanding the cultural aspects of fishing in American Samoa (see Table 7.)

Table 7. Factors of the cultural fishing model. Source: Kleiber and Leong (2018).

Factor	Sub-factors	Considerations could include:
Motivation	Commercial vs. Non-commercial	Proportion of non-commercial catch, as well as other non-commercial purposes such as ecological knowledge, or cultural practice.
Human Identity		The identity of the person involved in the fisheries including owner, captain, or crew.
Fishing Materials	Vessels	Materials used to make the vessels, where the vessels were made, and how long that vessel type has been in use in American Samoa.
	Gear	Materials used to make the gear, and how long that gear type has been in use in American Samoa.
	Infrastructure	Infrastructure or processing methods involved in the fishing value chain (both non-commercial and commercial).
	Capital Investment	Amount of capital investment needed for the fisheries.
Fishing Practice	Species	Cultural importance of certain species.
	Fishing Grounds	Cultural importance of certain fishing areas.
	Fishing Seasons	Cultural importance of fishing during certain seasons.
	Efficiency	Gear efficiency.
	Fishing Value Chain	Length of the value chain, and they type of value (cultural or commercial) being added to the catch at various stages.
Governance		The institutions and process of decision making.

Fishing currently done in American Samoa is unlikely to fulfill all aspects of cultural fishing identified by Kleiber and Leong (2018) and presented in Table 7. For example, many alia and longline fishermen are non-indigenous American Samoa residents. While these fishermen may not be considered “cultural” in the category of “human identity,” many of them practice *Fa’a Samoa* and *Tautua* and so their motivations for fishing would align with cultural practices. Similarly, longline fishing by modern alia vessels involves aspects of cultural fishing. The alia longline fishery in American Samoa was a commercial endeavor that combined modernization (e.g., aluminum-hulled vessels powered with outboard engines; monofilament line, etc.) with customary fishing practices (Koboski 2014). Alia longline fishermen sold most of their tuna catch, but they also shared some of the catch within the American Samoa community. This is

also true for large longline vessels operating in American Samoa such that fishermen sell most of the catch, but retain some of the catch to provide to community members for food and cultural events. Approximately 500 pounds per trip from American Samoa large longline vessels is shared with crew, community members and church groups (Christina-Sancheze Lutu, pers. comm., July 2017). Furthermore, most of the currently active large longline vessels operating out of American Samoa have ownership interests that include indigenous American Samoan as well as local residents.

3.7 Socio-economic Setting

The socioeconomic setting for the American Samoa longline fishery is described below. A more detailed description of the fishery and the latest socio-economic statistics can be found in the Pelagic FEP Annual SAFE Reports at: <http://www.wpcouncil.org/annual-reports/>.

While many aspects of their communities have changed in contemporary times, American Samoans have retained a traditional socio-cultural system that is strongly intertwined with fishing. Social values still influence when and why people fish, how they distribute their catch, and influence the meaning of fish within society. Fish and other resources often move through a complex and culturally-embedded exchange system that supports the food needs of *'aiga* (family) and recognizes the status of both the *matai* (chief) and village ministers (Severance et al. 1999).

The excellent harbor at Pago Pago and certain special provisions of U.S. law form the basis of American Samoa's decades-old fish processing industry (Osman 1997). The Territory is exempt from the Nicholson Act, which prohibits foreign ships from landing their catches in U.S. ports. American Samoan products with less than 50% market value from foreign sources enter the United States duty free (Headnote 3(a) of the U.S. Tariff Schedule). In 2017, the American Samoa government employed 5,849 people, the private sector employed 8,247 people, and the cannery employed 2,312 people.

3.7.1 Tuna Canneries

Tuna processing in local canneries play a large role in the American Samoa economy through direct employment (largest private employer) and indirectly via delivery of goods or services in support of the processing facilities and employees. From 1995 to 2003, the value of canned tuna imported into the United States from American Samoa exceeded that of tuna imported from all other countries combined (Government Accountability Office 2014).

The American Samoa tuna canning industry faces significant competition from other countries. Lower employee wages and reductions in tariffs, have been reducing the competitive advantage of American Samoa's duty-free access to the U.S. canned tuna market. On October 5, 2010, Tri Marine International acquired the former Chicken of the Sea tuna cannery facility and formally reopened the cannery in 2015, trading under the name Samoa Tuna Packers (STP). However, in October 2016, STP stopped operations indefinitely, directly impacting 800 STP workers, but will continue to operate STP as a logistics hub for the Tri Marine Group.⁵ Today, the remaining

⁵ <http://www.staradvertiser.com/2016/10/13/business/business-breaking/tuna-cannery-in-american-samoa-to-halt-production/>

cannery, StarKist Samoa, has now leased some of the STP facility to support its operations. In 2019, StarKist stated that it remains committed to processing operations in American Samoa.⁶

According to the American Samoa's most recent statistical yearbook, the canning industry accounted for an estimated 14% of all the jobs in the territory, with StarKist being the single largest employer in the private sector by a large margin. In fact, StarKist made up 97% of American Samoa's principal domestic exports (American Samoa Department of Commerce Statistics Division 2017).

3.7.2 2009 Tsunami

On September 29, 2009, a magnitude 8.0 submarine earthquake south of the Samoan archipelago triggered a tsunami that made landfall in several Pacific island locations, including American Samoa and Samoa. Four tsunami waves 15 to 20 ft. (4 to 6 m) high arrived ashore on American Samoa about 15 minutes after the quake, killing 32 people.⁷ In Pago Pago, near the capital, streets and fields filled with debris, mud, overturned cars and boats. Tsunami waves flattened several buildings in the village and damaged a primary power generation station. For a period following the disaster, shelters housed an estimated 2,200 people across the island.

In terms of fish harvesting equipment and fishery management resources, the waves damaged or destroyed all of the American Samoa DMWR floating docks and the first floor of the building. The tsunami also damaged DMWR equipment, such as vehicles and boats. All ramps in Pago Pago and shipyard dry-docking facilities sustained damage and major boat dock areas were unusable for a time because of the many vessels that were tossed about. A facility and associated equipment located in Pago Pago that was funded by the Community Development Project Program for the Pago Pago Commercial Fishermen Association project was destroyed.

The Council and NMFS PIRO jointly examined the effects of the tsunami on the territory's fishing fleets. The tsunami destroyed or damaged many alia vessels predominately used in the bottomfish fishery, which were likely some of the same alia once used for longline fishing. The U.S. Secretary of Commerce determined a commercial fishery failure occurred for the commercial bottomfish fishery on January 26, 2012, clearing the way for Congress to appropriate \$1 million in relief funds. Funds have been spent on repairing alia vessels, repairing coastal docks, providing funds to bottomfish fishermen who lost their vessels in the tsunami, building a new boat ramp, and installing an ice machine near the DMWR facility.

3.7.3 Revenues

After the American Samoa longline limited entry program was initially implemented (2005 to 2007), longline fishing effort increased. However, after peaking in 2007, fishing effort, landings and revenue have generally declined (Figure 3). In 2019, the American Samoa longline fleet landed approximately 2.9 million pounds of pelagic species with an estimated total revenue of \$3.8 million.

⁶ <https://www.undercurrentnews.com/2019/04/29/starkists-still-committed-to-american-samoa-plant-despite-challenges/>

⁷ <https://www.doi.gov/emergency/factsheets/american-samoa-earthquake-and-tsunami-damage>

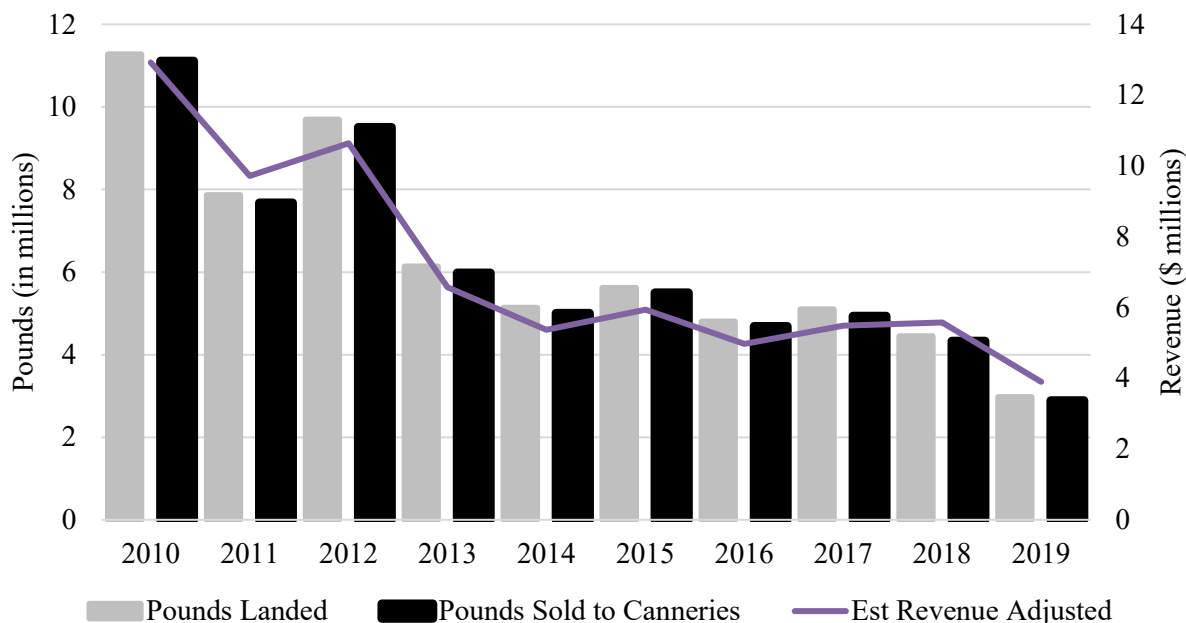


Figure 3. Commercial landings and revenues of the American Samoa longline fishery from 2010-2019 adjusted to 2019 dollars.

Previous cost-earning studies on the American Samoa fishery were conducted based on 2001 (O'Malley and Pooley 2002) and 2009 (Pan et al. 2017) operational years. O'Malley and Pooley (2002) found that a majority of vessels were profitable based on the 2001 operation, generating revenue sufficient to meet expenses and earned profit (approximately \$251,000 per vessel per year). However, eight years later, a cost earnings study conducted by Pan et al. (2017) found that the economic performance of fishing operations considerably decreased in 2009 compared to 2001. Of 23 vessels surveyed in 2009, only 52% (12 vessels) were able to make a net gain (earn a profit), while 48% of the vessels showed negative returns in fishery operations. On average, the vessel owners in 2009 generated a small margin of profit (approximately \$6,000 per vessel), which equates to only 2% of the profit level in 2001 (Pan 2019). By 2016, the economic net return was 10% of 2001 with the increase largely attributed to a decrease in fixed costs (Pan 2019).

3.8 Target and Non-Target Stocks

South Pacific albacore is the main target stock of the American Samoa longline fishery. However, fishermen also target and retain yellowfin, bigeye, skipjack, and swordfish (Table 8).

3.8.1 South Pacific Albacore Tuna

The most recent stock assessment of South Pacific albacore was conducted by Tremblay-Boyer et al. (2018) using data up through 2016. Results indicate the stock is neither overfished nor subject to overfishing as median $F/F_{MSY} = 0.2$ or overfished. The stock assessment suggests that increases in fishing mortality will likely to lead to small increases in catch, but reduce size classes available to longline fisheries with associated impacts on vessel profitability. The 2018

stock assessment estimated average MSY at 209,326,000 lb. In 2018, the American Samoa longline fishery landed 2,232,098 lb of albacore in American Samoa, representing 1% of the estimated MSY (WPFMC 2020).

3.8.2 Skipjack Tuna

The American Samoa longline fishery catches Western and Central Pacific Ocean skipjack tuna incidentally while fishing for albacore. The most recent assessment of skipjack tuna (*Katsuwonus pelamis*) in the western and central Pacific Ocean (WCPO) was conducted by McKechnie et al. 2016 using data through 2015. The assessment indicated that the WCPO skipjack tuna stock is neither overfished nor subject to overfishing. The assessment estimated the MSY for this stock at 1,875,600 t. The fishing mortality reference point $F_{\text{recent}}/F_{\text{MSY}}$ is 0.45. Skipjack stock is most probably at or close to the target reference point of $50\%SB_{F=0}$. The American Samoa longline fishery landed 147,758 lb (~73.9 t) of skipjack in 2018, less than 0.003% of the estimated MSY (WPFMC 2019a). Total estimated catch (t) of skipjack in the Pacific Ocean was 1,965,069 (WPFMC 2019a).

3.8.3 Yellowfin Tuna

The American Samoa longline fishery catches yellowfin tuna incidentally while fishing for albacore. The most recent stock assessment of yellowfin tuna (*Thunnus albacores*) in the WCPO was conducted by Tremblay-Boyer et al. (2017) using data through 2015. The assessment indicated that WCPO yellowfin is neither overfished nor subject to overfishing. Tremblay-Boyer et al. (2017) estimated the MSY for this stock to be 662,583 t. The median estimate of $F_{\text{recent}}/F_{\text{MSY}}$ is 0.75. The median $SB_{\text{latest}}/SB_{F=0}$ value was 0.33. The American Samoa longline fishery landed 542,078 lb (~271 t) of yellowfin tuna in 2018, less than 0.03% of the 2017 total Pacific Ocean yellowfin catch (926,968 t; WPFMC 2019a).

3.8.4 Bigeye Tuna

Bigeye tuna (*Thunnus obesus*) is considered a Pacific-wide stock, but is assessed separately in the WCPO and eastern Pacific. The most recent stock assessment for WCPO bigeye tuna was completed in 2017, and analyzed bigeye tuna catch from Indonesia in the far western Pacific to 150° W in the central Pacific Ocean (McKechnie et al. 2017). The assessment indicated that WCPO bigeye is neither overfished nor subject to overfishing, and estimated the MSY for this stock at 153,444 t. In 2018, the American Samoa longline fishery landed 103,391 lb (~52 t) of bigeye tuna (WPFMC 2019a). It is of note that in 2016, nearly 1,000 t of bigeye was caught by vessels fishing under American Samoan longline limited access permits landing in Honolulu as well as Hawaii-based longline vessels operating under a specified fishing agreement with American Samoa (Williams and Terwasi 2017). The total Pacific Ocean catch of bigeye tuna catch in 2017 by all nations was 216,680 t (WPFMC 2019a).

3.8.5 Swordfish Stocks

The American Samoa fishery incidentally catches mostly small juvenile swordfish (*Xiphias gladius*). This species is found in tropical, subtropical, and temperate seas worldwide, ranging from around 50° N to 50° S (Bartoo and Coan 1989). Adults can tolerate a wide range of water

temperature, anywhere from 5° to 27° C, but are most often found in areas with surface waters above 13° C (Nakamura 1985). The most recent stock assessment of Southwest Pacific swordfish was conducted by Takeuchi et al. (2017) and found that Southwest Pacific swordfish is neither overfished nor subject to overfishing. Total estimated catch (t) of swordfish by the longline fisheries was 38,315 t in 2017 (WPFMC 2019a). Catches of Southwest Pacific swordfish in 2018 by the American Samoa longline fishery (13,434 lb; ~6.7 t) amounted to approximately 0.08% of the MSY.

3.8.6 Incidental Catch

In addition to tuna species, the American Samoa longline fishery also catches and lands various non-tuna PMUS, including wahoo, mahimahi, swordfish, blue marlin, spearfish, striped marlin, and moonfish (Table 8). These landings, however, only represent 4 percent of the total landings and 2 percent of the total landings value in 2019 (WPFMC 2020).

3.9 Protected Species

The American Samoa longline fishery has the potential to interact with protected species, including sea turtles, marine mammals, sharks, manta ray, and seabirds. In accordance with the Endangered Species Act (ESA) and Marine Mammal Protection Act (MMPA), the fishery has undergone reviews to evaluate impacts and, if appropriate, to authorize a level of interaction that will ensure the fishery will not prevent the survival and continued recovery of listed species, or the conservation of other protected species.

NMFS funds fishery observer recruitment, training, and support in the Western Pacific Region including its observer program in American Samoa. Prior to beginning the mandatory observer program in American Samoa, NMFS conducted a pilot program from August through October 2002. The pilot program observed 76 sets on one Class C vessel (vessels 50.1 – 70 ft long) and two Class D vessels (vessels > 70 ft long) that set 197,617 hooks. There were no sightings of, or interactions with, any protected species including sea turtles, marine mammals, or seabirds (NMFS 2003).

Beginning in April of 2006, a portion of longline trips on Class B, C, and D vessels are subject to being observed by NMFS-provided fishery observers. Based on a random assignment scheme, Federal observers can be assigned to monitor protected interactions and collect other fishery data on American Samoa longline vessels > 40 ft. NMFS increased the annual observer coverage rate in 2010 and has since maintained a minimum of approximately 20% coverage rate.

Table 8. 2019 estimated total landings (lbs.) of pelagic species by gear in American Samoa.
Source: WPFMC (2020).

Species	Longline	Troll	Other	Total
Skipjack tuna	149,917	12,958	0	162,875
Albacore tuna	2,232,098	0	0	2,232,098
Yellowfin tuna	399,298	3,140	0	402,438
Kawakawa	0	233	63	296
Bigeye tuna	66,547	0	0	66,547
Bluefin tuna	476	0	0	476
TUNAS TOTAL	2,848,336	16,331	63	2,864,730
Mahimahi	3,250	714	75	4,040
Blue marlin	62,905	834	0	63,739
Striped marlin	3,509	0	0	3,509
Wahoo	38,555	601	0	39,156
Swordfish	8,128	0	0	8,128
Sailfish	3,758	181	0	3,939
Spearfish	4,324	0	0	4,324
Moonfish	1,185	0	0	1,185
Oilfish	19	0	143	162
Pomfret	554	0	151	706
Thresher shark	1,357	0	0	1,357
Shortfin mako shark	90	0	0	90
NON-TUNA PMUS TOTAL	127,634	2,330	369	130,335
Pelagic fishes (unknown)	40	0	0	40
Mackerel	0	9	0	9
Barracudas	784	0	10	795
Great barracuda	0	0	118	118
Rainbow runner	0	24	57	81
Dogtooth tuna	0	336	832	1,167
OTHER PELAGICS TOTAL	824	369	1,017	2,210
TOTAL PELAGICS	2,976,794	19,030	1,449	2,997,275

3.9.1 Species Protected under the Endangered Species Act (ESA)

Table 9 identifies the species listed as endangered or threatened under the ESA that have the potential to interact with the American Samoa longline fishery.

Table 9. ESA-listed species with the potential to interact with American Samoa longline vessels

Species	ESA Status
Sea Turtles	
Central North Pacific green turtle distinct population segment (DPS) (<i>Chelonia mydas</i>)	Threatened
East Pacific green turtle DPS (<i>Chelonia mydas</i>)	Threatened
Central South Pacific green turtle DPS (<i>Chelonia mydas</i>)	Endangered
Central West Pacific green turtle DPS (<i>Chelonia mydas</i>)	Endangered
East Indian-West Pacific green turtle DPS (<i>Chelonia mydas</i>)	Threatened
Southwest Pacific green turtle DPS (<i>Chelonia mydas</i>)	Threatened
Hawksbill turtle (<i>Eretmochelys imbricata</i>)	Endangered
Leatherback turtle (<i>Dermochelys coriacea</i>)	Endangered
South Pacific loggerhead turtle DPS (<i>Caretta caretta</i>)	Endangered
Olive ridley turtle (<i>Lepidochelys olivacea</i>)	Threatened
Marine Mammals	
Blue whale (<i>Balaenoptera musculus</i>)	Endangered
Fin whale (<i>Balaenoptera physalus</i>)	Endangered
Sei whale (<i>Balaenoptera borealis</i>)	Endangered
Sperm whale (<i>Physeter macrocephalus</i>)	Endangered
Seabirds	
Newell's shearwater (<i>Puffinus auricularis newelli</i>)	Threatened
Sharks and Rays	
Oceanic whitetip shark (<i>Carcharhinus longimanus</i>)	Threatened
Scalloped hammerhead shark, Indo-West Pacific DPS (<i>Sphyrna lewini</i>)	Threatened
Giant manta ray (<i>Mobula birostris</i>)	Threatened
Corals	
<i>Acropora globiceps</i>	Threatened
<i>Acropora jacquelineae</i>	Threatened
<i>Acropora retusa</i>	Threatened
<i>Acropora speciose</i>	Threatened
<i>Euphyllia paradivisa</i>	Threatened
<i>Isopora crateriformis</i>	Threatened

Source: <https://www.fisheries.noaa.gov/species-directory/threatened-endangered>

3.9.2 Sea Turtles

All Pacific sea turtles are listed under the ESA as either threatened or endangered except for the flatback turtle (*Natator depressus*). This species is native to Australia and does not occur in the action area, and thus will not be addressed in this document. Detailed information, including the range, abundance, status, and threats of the listed sea turtles, can be found in the status reviews, five-year reviews, and recovery plans for each species at NMFS website:

<https://www.fisheries.noaa.gov/sea-turtles>.

In addition to protection under the Federal ESA, sea turtles in American Samoa are protected by the domestic fishing and hunting regulations for American Samoa which prohibit the import, export, sale, possession, transport, or trade of sea turtles or their parts and take (as defined by the ESA) and carry additional penalties for violations at the local government level. The Pelagic FEP and its implementing regulations at 50 CFR 665 contain a number of requirements to prevent and mitigate the effects of the longline fishery on protected species—sea turtles. These include a requirement for all American Samoa-based longline vessels longer than 40 ft to deploy all longline hooks to fish at least 100 m deep and carry a fishery observer on board if requested by NMFS. Since 2010, NMFS placed observers on approximately 20% of all applicable longline trips annually.

Table 10 shows the observed interactions with listed seas turtles by the American Samoa longline fishery within the action area. Currently, there are no observed interactions with loggerheads in the American Samoa longline fishery. Although there are no confirmed interactions, and the population of the South Pacific loggerhead DPS is small, there is still a possibility for them to travel through the action area (Kobayashi et al. 2014).

Table 10. Observed interactions (i.e., takes) for ESA listed sea turtles in the American Samoa longline fishery, 2010-2018.

Year	Green Sea Turtles ⁸	Hawksbill Sea Turtle	Leatherback Sea Turtle	Olive Ridley Sea Turtle	% Observer Coverage
2010	6	0	0	0	25%
2011	11	0	2	1	33%
2012	0	0	1	1	20%
2013	2	0	2	1	19%
2014	2	0	0	2	19%
2015	0	0	3	1	22%
2016	4	1	1	3	19%
2017	4	0	1	2	20%
2018	4	2	1	2	18%

⁸ The green turtle DPS did not become effective until May 2016.

3.9.3 Marine Mammals

The American Samoa longline fishery has the potential to interact with marine mammals, and the fishery fishes in compliance with provisions of the Marine Mammal Protection Act, which authorizes incidental interactions by commercial fisheries. Marine mammals that occur in the Western Pacific Region and have been recorded as being sighted or probable in waters around American Samoa are shown in Table 11. Information on cetaceans around American Samoa is limited due to the lack of comprehensive surveys in the area (Johnston et al. 2008). Table 12 summarizes the fleet-wide non-ESA listed marine mammal interactions in the American Samoa longline fishery from 2007 to 2018. To date, no sperm, blue, fin, or sei whale interactions have been observed or reported in the American Samoa longline fishery. Detailed information on these species' geographic range, abundance, bycatch estimates, and status can be found in the most recent stock assessment reports (SARs), available online at: fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments.

Table 11. Marine mammals occurring around American Samoa.

Common Name	Scientific Name
Blue Whale	<i>Balaenoptera musculus</i>
Blainville's Beaked Whale*	<i>Mesoplodon densirostris</i>
Bryde's Whale	<i>Balaenoptera edeni</i>
Cuvier's Beaked Whale	<i>Ziphius cavirostris</i>
Dwarf Sperm Whale	<i>Kogia simus</i>
False Killer Whale	<i>Pseudorca crassidens</i>
Fin Whale *	<i>Balaenoptera physalus</i>
Humpback Whale	<i>Megaptera novaeangliae</i>
Killer Whale	<i>Orcinus orca</i>
Melon-Headed Whale	<i>Peponocephala electra</i>
Minke Whale	<i>Balaenoptera acutorostrata</i>
Pygmy Killer Whale	<i>Feresa attenuata</i>
Pygmy Sperm Whale	<i>Kogia breviceps</i>
Sei Whale*	<i>Balaenoptera borealis</i>
Short-Finned Pilot Whale	<i>Globicephala macrorhynchus</i>
Sperm Whale*	<i>Physeter macrocephalus</i>
Bottlenose Dolphin	<i>Tursiops truncatus</i>
Common Dolphin	<i>Delphinus delphis</i>
Fraser's Dolphin	<i>Lagenodelphis hosei</i>
Pantropical Spotted Dolphin	<i>Stenella attenuata</i>
Risso's Dolphin	<i>Grampus griseus</i>
Rough-toothed Dolphin	<i>Steno bredanensis</i>
Spinner Dolphin	<i>Stenella longirostris</i>
Striped Dolphin	<i>Stenella coeruleoalba</i>

Source: http://www.fpir.noaa.gov/PRD/prd_marine_protected_species_of_american_samoa_list.html, accessed April 28, 2017. (*) = cetacean listed as endangered.

As can be seen from data in Table 12, interactions between the fishery and marine mammals are rare. Most cetaceans observed interacting with the fishery are released alive, although most of those interactions are classified as serious injury. Based on data from 2006 to 2008, the total estimated number of serious injuries and mortalities for marine mammals per year in the American Samoa longline fishery is 3.6 rough-toothed dolphins (CV = 0.6) and 7.8 false killer whales (CV = 1.7; Carretta et al. 2018).

Table 12. Annual marine mammal interactions expanded from observer data to fleet-wide estimates for the American Samoa longline fishery from 2007 to 2018. Source: WPFMC 2019a

Species	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Rough-toothed dolphin	0	16	0	0	15	0	5	0	0	10	5	6
Cuvier's beaked whale	0	0	0	0	3	0	0	0	0	0	0	0
False killer whale	0	31	0	0	9	0	5	0	9	10	5	6
Short-finned pilot whale	0	0	0	0	0	0	0	5	0	0	0	0
Unidentified cetacean	0	0	0	0	6	0	0	0	0	0	0	0

3.9.4 Seabirds

All seabirds are protected under the Migratory Bird Treaty Act. Table 13 lists the seabird species that are considered residents or visitors in American Samoa. As can be seen from data in Table 14, interactions between the fishery and seabirds are rare.

ESA-Listed seabirds

Three seabirds in the South Pacific were listed as endangered under the ESA in 2009: the Chatham petrel (*Pterodroma axillaris*), Fiji petrel (*Pseudobulweria macgillivrayi*), and the magenta petrel (*Pterodroma magentae*). However, the ranges of these three species are assumed not to overlap with that of the American Samoa longline fishery. In a communication from USFWS to NMFS on July 29, 2011, and recorded in a memorandum for the record on the same date, USFWS advised that, because of the lack of overlap between the range of the American Samoa longline fishery and the ranges of Chatham, Fiji, and magenta petrels, the fishery would not affect those petrels. Additionally, the Newell's shearwater is listed as threatened under the ESA. The Newell's shearwater has only been confirmed in American Samoa once (Grant et al. 1994) and is considered an accidental visitor to American Samoa.

Other seabirds

Since 2006, there have been no documented sightings of Newell's shearwaters or interactions between Newell's shearwaters and longline vessels or gear. There have been only two interactions with unidentified shearwaters and one unidentified frigatebird recorded since 2006.

All three interactions recorded from 2006 through present were released dead. Three species of shearwaters (wedge-tailed shearwater, Audubon shearwater, and Christmas shearwater) and two species of frigatebirds (great frigatebird and lesser frigatebird) are considered residents in American Samoa. Abundance estimates of the three shearwater species are large, with an estimated 5,200,000 individuals for wedge-tailed shearwaters, 30,000 to 59,000 individuals for Audubon's shearwater and 150,000 individuals for Christmas shearwater (Waugh et al. 2009; BirdLife International 2019). Abundance estimates of great and lesser frigatebirds are not available, but both species are considered to be species of least concern (BirdLife International 2019). Information on the distribution of shearwaters and frigatebirds around American Samoa are limited. Wedge-tailed shearwaters are recorded to have a foraging range of 480 km from breeding sites, and great frigatebirds are recorded to have a foraging range of up to approximately 600 km from breeding sites (Maxwell and Morgan 2013).

Table 13. Seabirds occurring in American Samoa. Source: WPRFMC (2009).

Samoan name	English name	Scientific name
ta'i'o	Wedge-tailed shearwater	<i>Puffinus pacificus</i>
ta'i'o	Audubon's shearwater	<i>Puffinus lherminieri</i>
ta'i'o	Christmas shearwater	<i>Puffinus nativitatis</i>
ta'i'o	Tahiti petrel	<i>Pterodroma rostrata</i>
ta'i'o	Herald petrel	<i>Pterodroma heraldica</i>
ta'i'o	Collared petrel	<i>Pterodroma brevipes</i>
fua'o	Red-footed booby	<i>Sula</i>
fua'o	Brown booby	<i>Sula leucogaster</i>
fua'o	Masked booby	<i>Sula dactylatra</i>
tava'esina	White-tailed tropicbird	<i>Phaethon lepturus</i>
tava'e'ula	Red-tailed tropicbird	<i>Phaethon rubricauda</i>
Atafa	Great frigatebird	<i>Fregata minor</i>
Atafa	Lesser frigatebird	<i>Fregata ariel</i>
Gogouli	Sooty tern	<i>Onychoprion fuscatus</i>
Gogo	Brown noddy	<i>Anous stolidus</i>
Gogo	Black noddy	<i>Anous minutus</i>
Laia	Blue-gray noddy	<i>Procelsterna cerulea</i>
manu sina	Common fairy-tern (white tern)	<i>Gygis alba</i>
ta'i'o	Short-tailed shearwater	<i>Puffinus tenuirostris</i>
ta'i'o	Newell's shearwater (ESA threatened)	<i>Puffinus auricularis newelli</i>
ta'i'o	Mottled petrel	<i>Pterodroma inexpectata</i>
ta'i'o	Phoenix petrel	<i>Pterodroma alba</i>
ta'i'o	White-bellied storm petrel	<i>Fregetta grallaria</i>
ta'i'o	Polynesian storm petrel	<i>Nesofregetta fuliginosa</i>
n/a	Laughing gull	<i>Larus atricilla</i>
Gogosina	Black-naped tern	<i>Sterna sumatrana</i>

Table 14. Observed and estimated seabird interactions in the American Samoa longline fishery from 2006 to 2018. Source: NMFS American Samoa Longline Observer Program Annual Reports 2006–2019.

Year	Unidentified Shearwater		Unidentified Frigatebird		Black-footed Albatross	
	Observed	Estimated Total Interactions	Observed	Estimated Total Interactions	Observed	Estimated Total Interactions
2006	0	0	0	0	0	0
2007	1	14	0	0	0	0
2008	0	0	0	0	0	0
2009	0	0	0	0	0	0
2010	0	0	0	0	0	0
2011	1	2	0	0	0	0
2012	0	0	0	0	0	0
2013	0	0	1	5	0	0
2014	0	0	0	0	0	0
2015	0	0	0	0	13	13
2016	0	0	0	0	0	0
2017	0	0	0	0	0	0
2018	0	0	0	0	0	0
2019	1	1	0	0	0	0

Additionally, 13 observed interactions were reported with black-footed albatross in 2015. These occurred in the North Pacific and involved vessels which had departed American Samoa and landed fish in California. This interaction event is considered anomalous as American Samoa longline vessels are usually unlikely to travel into the California EEZ. Black-footed albatrosses number approximately 69,969 pairs and more than 95% nest on the Northwestern Hawaiian Islands (ACAP 2017; 2012). While the population is considered stable or increasing, the status of black-footed albatross is considered near threatened by IUCN (BirdLife International 2019.)

The American Samoa longline fishery’s observed interactions with two shearwaters is extremely low compared with its area population. The interaction with one frigate bird involves a species of least concern. The black-footed albatross interactions occurred outside the normal operating area of the American Samoa longline fishery.⁹

3.9.5 Sharks and Rays

Three species of ESA-listed elasmobranchs are known from around American Samoa and have the potential to interact with longline fishery. All three species are listed as threatened. These include scalloped hammerhead shark, oceanic whitetip shark, and the giant manta ray.

⁹ Interactions occurred in the North Pacific by vessels departing American Samoa and landing in California, passing through areas where black-footed albatrosses feed.

3.9.5.1 Scalloped Hammerhead Sharks

Abundance estimates for the Indo-West Pacific DPS of scalloped hammerhead shark are not available. There are some areas where there are depletions of local populations, such as off the coast of South Africa and Australia based on trends in abundance. Both of these areas are known to have high levels of illegal fishing that take sharks which is contributing to these decreasing trends. There is no information on the population trend for the Indo-west Pacific DPS in the area where the American Samoa longline fishery operates; however, there is no evidence to suggest that there is a localized depletion in the area because there are no artisanal or international shark fisheries in the action area.

The American Samoa longline fishery has incidentally caught very low numbers of scalloped hammerhead sharks. From 2006 to 2018, observers recorded 15 scalloped hammerhead sharks, or an average of one observed shark take per year (Table 15). Of the 15 observed scalloped hammerhead sharks, 11 were released alive and four were released dead (NMFS observer program, unpublished data), resulting in an estimated mortality rate of 25%.

Table 15. Number of observed interactions with the Indo-West Pacific scalloped hammerhead DPS and total estimate using a fishery observer coverage expansion factor to account for unobserved interactions from 2006 to 2018. Source: WPFMC (2019a).

Year	Observed	Estimated Total Interactions
2006	1	13
2007	1	15
2008	0	0
2009	0	0
2010	4	17
2011	2	7
2012	0	0
2013	0	0
2014	1	6
2015	1	3
2016	1	5
2017	1	5
2018	3	17

In addition to the ESA which prohibits unauthorized take of listed species, several laws prohibit shark finning or fishing and provide conservation benefit to scalloped hammerhead shark. The Shark Conservation Act of 2010 prohibits finning and discarding the carcass of a shark at sea and required all fishermen harvesting sharks to land the carcass intact, among other provisions. In November 2012, the Government of American Samoa banned shark fishing, including the sale possession, and distribution fins or other shark parts, within territorial waters (three nautical miles of the coastline).

3.9.5.2 Oceanic Whitetip Sharks

The oceanic whitetip shark is distributed worldwide in epipelagic tropical and subtropical waters between 30° North latitude and 35° South latitude. The species is a highly migratory species that is usually found offshore and in deep waters. Currently, the population is overfished and overfishing is still occurring throughout much of the species range. Oceanic whitetip biomass has declined by 86% since 1995 (Rice and Harley 2012; Young et al. 2017). As a result, catch trends of oceanic whitetip shark in both longline and purse seine fisheries have significantly declined, with declining trends also detected in some biological indicators, such as biomass and size indices. The most recent assessment results indicate that overall stock recovery is expected to be slow in the period following the conservation measure while the spawning biomass rebuilds (Tremblay-Boyer et al. 2019). Additional detailed information on the oceanic whitetip sharks, including the range, abundance, status and threats to the species can be found in the 2018 Status Review Report (Young et al. 2018) and the 2016 Proposed Rule (81 FR 96304). Table 16 describes all oceanic whitetip shark interactions in the fishery from 2010 to 2018.

Table 16. Observed and estimated annual takes using an expansion factor for the oceanic whitetip shark in the American Samoa longline fishery, 2010-2018.

Year	Observed	% Observer Coverage	Expansion Factor ¹	Estimated Interactions ²
2010	130	25%	4.0	520
2011	116	33%	3.0	348
2012	71	19.8%	5.1	363
2013	88	19.4%	5.2	458
2014	104	19.4%	5.2	541
2015	168	22.0%	4.5	756
2016	197	19.4%	5.2	1025
2017	63	20.0%	5.0	315
2018	108	17.5%	5.7	616

¹100/observer coverage. For example, for 2016, 100/19.4 = 5.2.

²(Observed interactions) x (Expansion factor). For example, for 2017, 63(5.0) = 315.

To mitigate impacts to the oceanic whitetip shark internationally, conservation measures recommended by regional fishery management organizations and implemented by regulations in the U.S. domestic fisheries have prohibited retention of oceanic whitetip sharks since 2011 in the Inter-American Tropical Tuna Commission (IATTC) convention area and since 2015 in the WCPFC convention area. Specifically, these conservation measures for the WCPFC (50 CFR 300.226) prohibit U.S. fishing vessels from retaining any part or carcass of an oceanic whitetip shark, except to assist WCPFC observers in collection of samples. The regulations also require vessel operators to release any oceanic whitetip shark as soon as possible and take reasonable steps for safely releasing oceanic whitetip sharks. Similar conservation measures prohibiting retention and safe release of oceanic whitetip sharks are implemented in the IATTC convention area (50 CFR 300.24). Additionally, Federal regulations prohibiting shark finning were implemented between 1999 and 2002, resulting in most shark species caught in this fishery to be released alive since 2001.

PIFSC is conducting a study to assess the post-release survival rates of oceanic whitetip sharks released alive in the Hawaii deep-set and American Samoa longline fisheries. Hutchinson and Bigelow (2019) found that the condition of bycatch sharks at release (“good” versus “injured”) and the amount trailing gear left on the animals were the two factors that had the largest effect on post release mortality. Animals released in good condition without trailing gear had the highest rates of survival. This study is ongoing.

3.9.5.3 Giant Manta Ray

The giant manta ray occurs worldwide in tropical, subtropical, and temperate bodies of water. The species is considered to be a migratory species, with estimated distances travelled of up to 1,500 km. There is no historical or current global abundance estimate or stock assessment for giant manta rays. Most estimates of subpopulations are based on anecdotal diver or fisherman observations, which are subject to bias, and range from around 100-1,500 individuals (Miller and Klimovich 2016).

Giant manta rays are rarely caught incidentally in the American Samoa longline fishery (Table 17). The 2016 NMFS Status Review Report for the giant manta ray concluded that the incidental catch of this species in U.S. longline fisheries is likely to have minimal effects on the population (Miller and Klimovich 2016). The average annual incidental catch of giant manta rays for 2011-2013 was 1,308 lb in the American Samoa longline fishery (NMFS 2016). Most giant manta rays incidentally caught in the American Samoa longline fishery are released alive, and there have been no observed interactions in the American Samoa longline fleet since 2014.

Table 17. Observed interactions and proportions of giant manta rays released alive in the American Samoa longline fishery (ASLL) from 2007 to 2018. Source: NMFS Pacific Islands Regional Observer Program, unpublished data.

Year	Observed Interactions	% Released Alive
2007	0	—
2008	0	—
2009	1	100%
2010	3	100%
2011	3	100%
2012	3	100%
2013	2	100%
2014	1	100%
2015	0	—
2016	0	—
2017	0	—
2018	0	—

3.9.6 Reef-Building Corals

Table 18 lists the ESA-listed coral species found in American Samoa. In the U.S. Pacific Islands, coral reef habitat occurs immediately within waters from 0-3 nm of shore, although some coral reef habitat can be found further offshore. Corals usually live in colonies and form “heads” or “shelves.” Generally, thousands of individual coral organisms (polyps) live together in a single structure that grows over time. Recently, many nearshore coral reefs have died through a process called bleaching, when coral expel algae that live within them. Bleaching often leads to death for coral colonies by causing malnutrition and increasing the colony’s susceptibility to disease. Some coral species populations have suffered declines because of bleaching.

On September 10, 2014, NMFS issued a final rule to list 20 species of corals as threatened under the ESA (79 FR 53851). Six species of listed corals are known to occur in waters around American Samoa from 0–50 m deep. Species-specific information on the exact location of these ESA-listed coral is unavailable. On November 27, 2020, NMFS published a proposed rule Federal Register (85 FR 76262) to designate critical habitat for these threatened corals pursuant to section 4 of the ESA. If the proposal is finalized, NMFS would re-initiate consultation under Section 7 of the ESA to determine the impact of fishing activities on critical habitat and any necessary management measures.

Table 18. ESA-listed corals in American Samoa

Common name	Scientific Name	ESA status in American Samoa	Interactions with the longline fishery
None	<i>Acropora globiceps</i>	Threatened	No interactions observed or reported
None	<i>A. jacquelineae</i>	Threatened	No interactions observed or reported
None	<i>A. retusa</i>	Threatened	No interactions observed or reported
None	<i>A. speciosa</i>	Threatened	No interactions observed or reported
None	<i>Euphyllia paradivisa</i>	Threatened	No interactions observed or reported
None	<i>Isopora crateriformis</i>	Threatened	No interactions observed or reported

3.9.7 ESA Consultations in the American Samoa longline fishery

In 2010, NMFS evaluated the potential impacts of the American Samoa longline fishery on ESA listed species on the implementation of Amendment 5 to the Pelagic FEP (WPFMC 2011), which established measures to reduce interactions between the fishery and green sea turtles. NMFS determined that the American Samoa longline fishery would have no effects on the blue, fin, or sei whale because no reports of these whales have been confirmed in the area, and was not likely to adversely affect the loggerhead sea turtle, and humpback and sperm whales (NMFS 2010a, 2010b). In a September 16, 2010, no-jeopardy biological opinion (NMFS 2010c), NMFS determined that the American Samoa fishery is likely to adversely affect green, hawksbill, leatherback, and olive ridley sea turtles, but not likely to jeopardize the continued existence or recovery of these species. The 2010 BiOp also anticipated and authorized a 3-year incidental take statement (ITS) for the green, hawksbill, leatherback, and olive ridley sea turtle (Table 19).

Table 19. History of ESA consultations in the American Samoa longline fishery.

Species Common Name	Consultation Date	Consultation Type	Outcome
Sea Turtles			
East Indian West Pacific Green Sea Turtle distinct population segment (DPS)	10/30/2015	BiOp	Likely to adversely affect (LAA), non-jeopardy
Central West Pacific Green Sea Turtle DPS	10/30/2015	BiOp	LAA, non-jeopardy
Southwest Pacific Green Sea Turtle DPS	10/30/2015	BiOp	LAA, non-jeopardy
Central South Pacific Green Sea Turtle DPS	10/30/2015	BiOp	LAA, non-jeopardy
East Pacific Green Sea Turtle DPS	10/30/2015	BiOp	LAA, non-jeopardy
Hawksbill Sea Turtle	10/30/2015	BiOp	LAA, non-jeopardy
Leatherback Sea Turtle	10/30/2015	BiOp	LAA, non-jeopardy
Olive Ridley Sea Turtle	10/30/2015	BiOp	LAA, non-jeopardy
Loggerhead, South Pacific DPS	10/30/2015	BiOp	LAA, non-jeopardy
Marine Mammals			
Humpback Whale	7/27/2010	LOC	Not likely to adversely affect (NLAA)
Sperm Whale	7/27/2010	LOC	NLAA
Blue Whale	5/12/2010	No Effects Memo	No Effect
Fin Whale	5/12/2010	No Effects Memo	No Effect
Sei Whale	5/12/2010	No Effects Memo	No Effect
Sharks			
Scalloped Hammerhead Shark, Indo-West Pacific DPS	10/30/2015	BiOp	LAA, non-jeopardy
Reef Building Corals			
<i>Acropora globiceps</i>	10/30/2015	BiOp	NLAA
<i>A. jacquelineae</i>	10/30/2015	BiOp	NLAA
<i>A. retusa</i>	10/30/2015	BiOp	NLAA
<i>A. speciose</i>	10/30/2015	BiOp	NLAA
<i>Euphyllia paradivisa</i>	10/30/2015	BiOp	NLAA
<i>Isopora crateriformis</i>	10/30/2015	BiOp	NLAA
Seabirds			
Newell's shearwater	5/19/2011	LOC	NLAA

In an informal consultation, dated May 19, 2011, USFWS concurred with NMFS' determination that the American Samoa longline fishery may affect, but is not likely to adversely affect the Newell's shearwater.

On October 30, 2015, NMFS reinitiated ESA Section 7 consultation on the American Samoa longline fishery in response to new information and new ESA listings. From 2011–2014, the NMFS observer program reported five leatherback and five olive ridley turtles caught in the fishery, which exceeded the incidental take statement (ITS) of one leatherback turtle and one olive ridley turtle every three years as in the 2010 BiOp. Additionally, on July 3, 2014, NMFS published a final rule (79 FR 38214) to list the Indo-West Pacific distinct population segment (DPS) of scalloped hammerhead shark as threatened under the ESA and on September 10, 2014, NMFS also published a final rule (79 FR 53852) that listed 20 new species of reef-building corals as threatened under the ESA, six of which occur around American Samoa. The Council also recommended management changes to the fishery that could result in effects not previously analyzed in prior consultations, including modifications to the American Samoa limited access permit program, an exemption to certain portions of the LVPA, and changes in retention limits for swordfish, among other potential measures.

NMFS documented its determinations on the continued operation of the American Samoa longline fishery on five sea turtle species, Indo-West Pacific DPS of scalloped hammerhead shark, and six species of reef-building corals in a no-jeopardy biological opinion (2015 BiOp) (NMFS 2015). NMFS concluded that the fishery is likely to adversely affect, but not likely to jeopardize green, hawksbill, leatherback, olive ridley, and the South Pacific DPS of loggerhead sea turtles and the Indo-West Pacific DPS of scalloped hammerhead shark, and not likely to adversely affect the six species of reef-building corals found in the action area. NMFS anticipated and authorized a 3-year ITS for the green, hawksbill, leatherback, olive ridley, and South Pacific DPS of loggerhead sea turtle, as well as the Indo-West Pacific DPS of scalloped hammerhead shark (Table 19).

On September 8, 2016 (81 FR 62260), NMFS published a final rule in the Federal Register to reclassify the humpback whale into 14 distinct population segments under the ESA, of which five DPSs are listed. The remaining nine DPSs were not listed, including the Hawaii DPS and the Oceania DPS both which occur in areas where the American Samoa longline fishery operates.

In 2018, NMFS listed new species under the ESA that triggered Section 7 consultation. On January 22, 2018, NMFS listed the giant manta ray as threatened under the ESA (83 FR 2916). On January 30, 2018, NMFS listed the oceanic whitetip shark as threatened under the ESA (83 FR 4153). The American Samoa fishery interacts with both the giant manta ray and the oceanic whitetip shark, triggering the requirement for re-initiating ESA section 7 consultation for the fishery. On September 28, 2018, NMFS issued a final rule to list the chambered nautilus as threatened under the ESA (83 FR 48976). There is currently no information to suggest that the American Samoa fishery has interacted with the chambered nautilus. NMFS has determined that protective regulations under 4(d) are not necessary or appropriate for the conservation of the giant manta ray, oceanic whitetip shark, or chambered nautilus at this time. Accordingly, incidental take is not prohibited under Section 9. Given the limited number of interactions with the fishery and the high proportion of both oceanic whitetip sharks and giant manta rays that are released alive, NMFS does not anticipate that effects from the continued operation of the

American Samoa longline fishery on the oceanic whitetip and giant manta ray populations are substantial.

In 2018, the American Samoa longline fishery exceeded the ITSs for four DPS of green (east Indian west Pacific, southwest Pacific, central South Pacific, and east Pacific), hawksbill, and olive ridley sea turtles. As a result of exceeding the ITSs for green, hawksbill, and olive ridley sea turtles, NMFS reinitiated ESA Section 7 consultation on the American Samoa longline fishery on April 3, 2019. In its request for reinitiation, NMFS anticipated that the continued operation of the longline fishery may affect and is likely to adversely affect the east Indian west Pacific, central west Pacific, southwest Pacific, central South Pacific, and east Pacific DPSs of the green turtle; the western Pacific population of the leatherback turtle; South Pacific loggerhead DPS; and eastern and western Pacific populations of olive ridley sea turtles. In its 2019 consultation, NMFS also evaluated the effects of the longline fishery on scalloped hammerhead sharks from the Indo-west Pacific DPS, oceanic whitetip sharks, and giant manta rays.

NMFS is currently preparing the Biological Opinion for the American Samoa longline fishery. On April 3, 2019, and again on May 6, 2020, NMFS determined that the conduct of the fishery during the extended period of consultation will not violate ESA Sections 7(a)(2) and 7(d); that is, the operation of the fishery is not likely to jeopardize the continued existence of species listed as threatened or endangered, result in the destruction or adverse modification of designated critical habitat, nor will it result in an irreversible or irretrievable commitment of resources.

3.9.7.1 Applicable MMPA Coordination – American Samoa longline fishery

The MMPA prohibits, with certain exceptions, the take of marine mammals in the U.S. EEZ and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the United States. The MMPA authorizes the Secretary to protect and conserve all cetaceans (whales, dolphins, and porpoises) and pinnipeds (seals and sea lions, except walruses). The MMPA requires NMFS to prepare and periodically review marine mammal stock assessments (16 U.S.C. 1361, et seq.).

Pursuant to the MMPA, NMFS has promulgated specific regulations that govern the incidental take of marine mammals during fishing operations (50 CFR 229). Under section 118 of the MMPA, NMFS must publish, at least annually, a List of Fisheries that classifies U.S. commercial fisheries into one of three categories based upon the level of serious injury and mortality of marine mammals that occurs incidental to each fishery. A Category I fishery is one with frequent incidental mortality and serious injury of marine mammals. A Category II fishery is one with occasional incidental mortality and serious injury of marine mammals. A Category III fishery is one with a remote likelihood or no known incidental mortality and serious injury of marine mammals. The American Samoa longline fishery is a Category II fishery in the 2020 List of Fisheries (85 FR 21079, April 16, 2020). Among other requirements, owners of vessels or gear engaging in a Category I or II fishery are required under the MMPA (16 U.S.C. 1387(c)(2)), as described in 50 CFR 229.4, to register with NMFS and obtain a marine mammal authorization to lawfully take non-endangered and non-threatened marine mammals incidental to commercial fishing operations. NMFS has previously determined that the American Samoa longline fishery (NMFS BiOp 2015) is not likely to adversely affect any ESA-listed marine mammals. On April

3, 2019, NMFS reinitiated consultation for impacts of the American Samoa deep-set longline fishery on the listing of oceanic white tip sharks and giant manta rays. On April 3, 2019, and more recently on May 6, 2020, NMFS determined that the conduct of the fishery during the period of consultation will not violate ESA Sections 7(a)(2) and 7(d).

3.10 Marine Protected Areas

In addition to the LVPAs described in Section 3.4, there are two other marine protected areas around American Samoa: the Rose Atoll Marine National Monument and the American Samoa National Marine Sanctuary. Commercial fishing is prohibited within Monument waters. In the past, prior to the establishment of the LVPA areas and the Rose Atoll Marine National Monument, there were no reported incidents of gear loss or vessel groundings.

The National Marine Sanctuary of American Samoa is one of 14 Federally designated underwater areas protected by NOAA's Office of National Marine Sanctuaries. The sanctuary is comprised of six protected areas, covering 13,581 square miles of nearshore coral reef and offshore open ocean waters across the Samoan Archipelago. NOAA originally established the sanctuary in 1986 to protect and preserve the 0.25 square miles of coral reef ecosystem within Fagatele Bay on Tutuila Island. In 2012, NOAA expanded the sanctuary to include Fagalua/Fogama'a (the next bay east of Fagatele), as well as areas at Aunu'u, Ta'u and Swains islands, and a marine protected area at Rose Atoll (known as Muliāva by the Manu'a residents) including nearby Vailulu'u Seamount.

3.11 Essential Fish Habitat and Habitat Areas of Particular Concern

The Magnuson-Stevens Act defines essential fish habitat (EFH) as those waters and substrate necessary for Federally managed species to spawn, breed, feed, and/or grow to maturity. Federal agencies whose action may adversely affect EFH must consult with NMFS in order to conserve and enhance Federal fisheries habitat. Habitat areas of particular concern (HAPC) are subsets of EFH that merit special conservation attention because they meet at least one of the following four considerations:

- 1) Provide important ecological function;
- 2) Are sensitive to environmental degradation;
- 3) Include a habitat type that is/will be stressed by development; and
- 4) Include a habitat type that is rare.

HAPC are afforded the same regulatory protection as EFH and do not exclude activities from occurring in the area, such as fishing, diving, swimming or surfing.

An "adverse effect" to EFH is anything that reduces the quantity and/or quality of EFH. It may include a wide variety of impacts such as:

- 1) Direct impacts (e.g., contamination or physical disruption);
- 2) Indirect impacts (e.g., loss of prey, reduction in species' fecundity); or site-specific/habitat wide impacts, including individual, cumulative or synergistic consequences of actions.

In 1999, the Council developed and NMFS approved EFH definitions for management unit species (MUS) of the Bottomfish and Seamount Groundfish FMP (Amendment 6), Crustacean

FMP (Amendment 10), Pelagic FMP (Amendment 8), and Precious Corals FMP (Amendment 4; 74 FR 19067, April 19, 1999). NMFS approved additional EFH definitions for coral reef ecosystem species in 2004 as part of the implementation of the Coral Reef Ecosystem FMP (69 FR 8336, February 24, 2004). NMFS also approved EFH definitions for deepwater shrimp through an amendment to the Crustaceans FMP in 2008 (73 FR 70603, November 21, 2008).

Ten years later, in 2009, the Council developed and NMFS approved five new archipelagic-based fishery ecosystem plans (FEP). The FEP incorporated and reorganized elements of the Councils' species-based FMPs into a spatially-oriented management plan (75 FR 2198, January 14, 2010). EFH definitions and related provisions for all FMP fishery resources were subsequently carried forward into the respective FEPs. In addition to and as a subset of EFH, the Council described (HAPC) based on the following criteria: ecological function of the habitat is important, habitat is sensitive to anthropogenic degradation, development activities are or will stress the habitat, and/or the habitat type is rare.

In 2019, to prioritize conservation and management efforts and improve fishery management, NMFS reclassified many of the management unit species to ecosystem component species (ECS) under Amendment 4 to the FEP for American Samoa, Amendment 5 to the Marianas Archipelago FEP, and Amendment 5 to the Hawaii FEP. These amendments do not modify fishery operations; however, the ECS no longer have associated EFH designations. The effects of this change are minor as the total area designated as EFH only changed for the deep benthic substrates near Guam, CNMI, and American Samoa (84 FR 2767, February 8, 2019).

In considering the potential impacts of a proposed fishery management action on EFH, all designated EFH must be considered. Table 20 briefly summarizes the designated areas of EFH and HAPC for FEP MUS. Note that the target depth for the fishery's primary target, albacore tuna, is approximately 100 to 300 m below the surface (WPFMC 2009).

Table 20. Potentially affected EFH and HAPC for Pelagic FEP MUS.

MUS	Species Complex	EFH	HAPC
Pelagic	Tunas, billfish, sharks, and other pelagic MUS	<p>Egg/larval: The water column down to a depth of 200 m (100 fm) from the shoreline to the outer limit of the EEZ</p> <p>Juvenile/adult: The water column down to a depth of 1,000 m (500 fm)</p>	Water column from the surface down to a depth of 1,000 m (500 fm) above all seamounts and banks with summits shallower than 2,000 m (1,000 fm) within the EEZ

3.12 Administration and Enforcement

NMFS conducts three administrative processes relevant to this action: in-season catch monitoring; enforcement; and publication of catch limits, specified fishing agreements, and closures. The administrative burden of the fishery involves PIFSC monitoring catches by the American Samoa longline fishery, forecasting if/when any limits may be reached, and collecting and correcting catch data. PIFSC estimates this current administrative burden to be about half of

a full-time employee salary per year and \$75,000 in administrative costs for the longline monitoring program (WPFMC 2014). Regarding enforcement, all alternatives require PIFSC continue monitoring the fishery, and that NOAA OLE and USCG continue monitoring vessel compliance with applicable regulations and laws through vessel monitoring systems and vessel boarding at sea.

3.13 Western and Central Pacific Fisheries Commission

The WCPFC was established by the Convention for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPFC Convention), which entered into force on June 19, 2004. Members of the Commission include: Australia, China, Canada, Cook Islands, European Union, Federated States of Micronesia, Fiji, France, Japan, Kiribati, Korea, Republic of Marshall Islands, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Philippines, Samoa, Solomon Islands, Chinese Taipei, Tonga, Tuvalu, United States of America, and Vanuatu. Participating Territories of the Commission include: American Samoa, Commonwealth of the Northern Mariana Islands, French Polynesia, Guam, New Caledonia, Tokelau, Wallis and Futuna. Cooperating non-members include: Belize, Indonesia, Senegal, Mexico, El Salvador, Ecuador, and Vietnam. The WCPFC area of competence is shown in Figure 4.

In 2005, the WCPFC agreed on a conservation and management measure for South Pacific albacore whereby Commission Members, Cooperating Non-Members, and participating Territories (CCMs) are to not increase the number of their fishing vessels actively fishing for South Pacific albacore in the Convention Area south of 20°S above current (2005) levels or recent historical (2000-2004) levels (Conservation and Management Measure 2005-02). The conservation and management measure also includes a provision whereby the requirement to cap the level of fishing vessels described above shall not prejudice the legitimate rights and obligations under international law of small island developing State and Territory CCMs in the Convention Area for whom South Pacific albacore is an important component of the domestic tuna fishery in waters under their national jurisdiction, and who may wish to pursue a responsible level of development of their fisheries for South Pacific albacore. WCPFC has also agreed on conservation and management measures for Southwest Pacific swordfish, bigeye and yellowfin, Southwest Pacific striped marlin, Bluefin, sea turtles, seabirds, and sharks. See <http://www.wcpfc.int/conservation-and-management-measures> for more information.

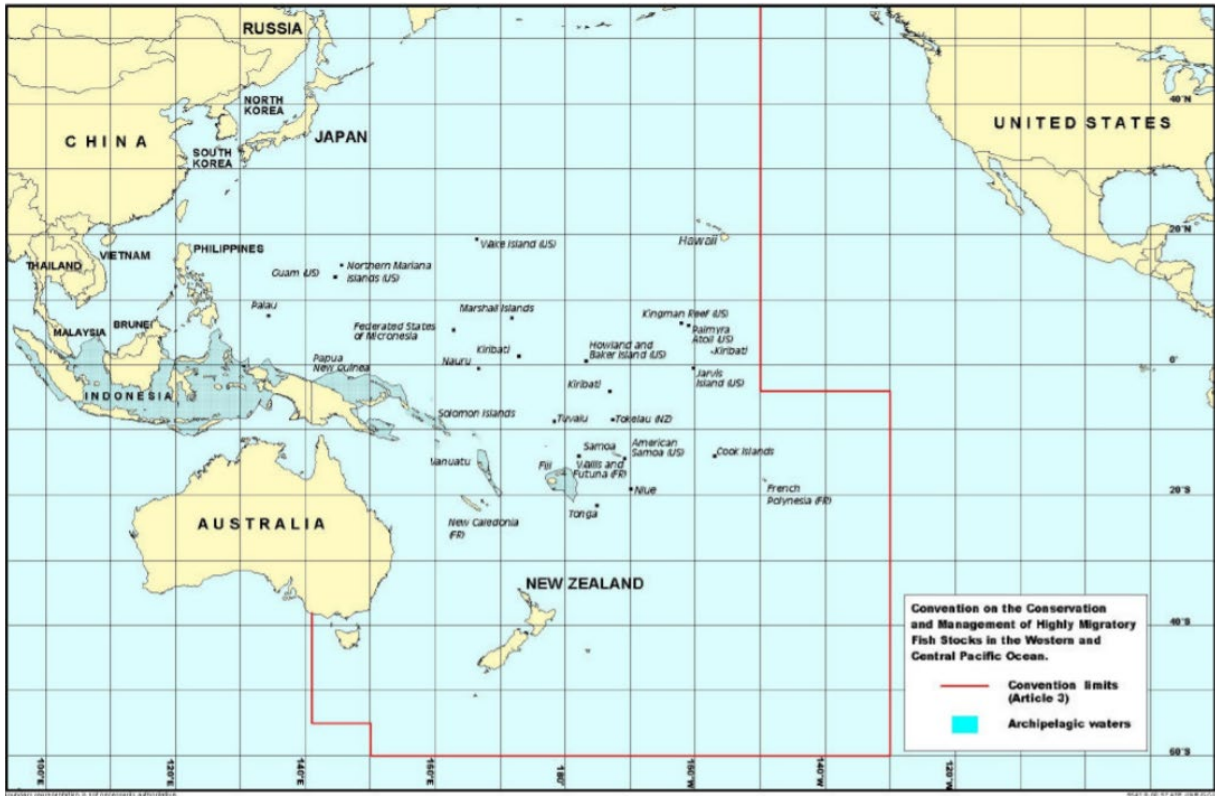


Figure 4. Map of the WCPFC Area of Competence.

4 EFFECTS OF THE ALTERNATIVES

The following section describes the potential direct, indirect, and cumulative effects, which may occur from implementing the proposed action. The objectives of this action are to 1) provide for sustained community and indigenous American Samoan participation in the small vessel longline fleet, and 2) reduce the complexity of the limited entry program.

Table 21. Summary of the affected environment and potential effects of the status quo and proposed action.

	Alternative 1: Status Quo / No Action	Alternative 2: Modify the American Samoa Longline Limited Entry Program
Proposed Action	Continue the American Samoa Longline Limited Entry program with no changes	Consolidate permits into two size-classes; modify minimum harvest; permit minimum harvest to be made beyond the U.S. EEZ around American Samoa, remove history requirement; and require U.S. citizenship/or national status.
Physical Resources	Fishery is not having a large effect on physical features of the ocean or coastal areas.	No change.
Economic Impact to fishery participants	Similar to recent years	Possibly a slight increase in participation by alia fishermen. Possibly an increase in revenue for Class C vessels that upgrade to a larger vessel.
Effects on South Pacific Albacore (Target Stock)	Fishing is sustainable and consistent with domestic and international limits and other requirements.	Possibly a slight increase in participation by alia fishermen. No potential to change impacts to target stocks. Fishing would remain sustainable and consistent with fishery conservation and management requirements.
Effects on non-target or bycaught species	Fishing is sustainable and consistent with domestic and international limits and other requirements.	Possibly a slight increase in participation by alia fishermen. No potential to change impacts to non-target stocks. Catches would remain sustainable and in compliance with fishery conservation and management requirements.
Effects on Protected Resources	Incidental interactions are monitored and are rare. Fishing is done in compliance with the ESA, MMPA, MBTA and is not resulting in jeopardy of any listed species.	Possibly a slight increase in participation by alia fishermen. No substantial effects on protected species that have not been considered in existing and ongoing consultations.
Effects on Essential Fish Habitat (EFH)	No adverse impact to EFH	No additional impact to EFH

4.1 Potential Effects on Physical Setting

Based on review of the fishery over time, longline fishing based out of American Samoa is not known to affect air quality, noise, or water quality. The physical setting of the fisheries is further described in more detail in the Pelagic FEP (WPFMC 2009) and Pelagic SAFE Report (WPFMC 2020). There are no anticipated changes to the physical environment for either the no action alternative or Alternative 2. Pelagic longline gear by virtue of its fishing in the water column and not on the seafloor means that the fishery does not have a large adverse effect on bottom habitats. Longline gear is not likely to come into contact with shallow seamounts or coral reef habitats. The American Samoa longline fishery is not known to have large negative effects on habitats and neither alternative is expected to change the way in which this fishery is currently conducted. Modifying the American Samoa longline limited entry program is not expected to lead to changes by any sector of the fishery (large vessel, small vessel, or dual permitted vessels fishing out of Hawaii) in any way. Therefore, the proposed action would not affect physical, chemical, or biological conditions including effects on coral reefs, other coastal marine habitats, open ocean waters including ocean circulation, temperature, or salinity.

4.2 Potential Socio-Economic Effects on Participants and Fishing Communities

Alternative 1: No Action / Status Quo Alternative

Under the No-action Alternative, there would be no changes to the limited entry program and therefore no new impacts to fishers or the fishing community of American Samoa. As authorized under 50 CFR § 665.816(g), prospective permit holders who were denied an initial permit in 2005, because they lacked fishing history prior to March 2002, are eligible to obtain a permit if they have more recent history (accrued between March 2002 and issuing of initial limited access permits in 2005) of longline fishing in the U.S. EEZ around American Samoa. However, small and large vessel entrants to the fishery will continue to encounter potential barriers.

Specifically, NMFS denied several applicants during the initial permit issuance in 2005 because they were unable to meet the criterion of demonstrating pre-March 2002 participation in longline fishing around American Samoa. This same impediment remains for applicants for current available permits. This situation would remain unchanged under this alternative; fishermen who are not able to meet current eligibility criteria would remain so and the number of small vessel inactive permits would potentially remain unused. Small vessel participants are likely indigenous American Samoans, and the eligibility requirements of the No-action Alternative will probably continue to hinder entry into the longline fishery by members of the indigenous communities of American Samoa. Currently, there are 11 permits issued in the combined small vessel class. However, only one or two vessels are active in the longline fishery out of the 11 permits issued.

Under Alternative 1, maintaining minimum harvest requirements of 1,000 lb (Classes A and B) and 5,000 lb (Classes C and D) could result in some participants being unable to renew their permits. This would be the case if the participant could not meet the relevant requirement because of external factors, such as the September 2009 tsunami that caused damage to small and large longline vessels. Although the minimum harvest requirement for the small vessels may not seem significant, alia vessels are small and several trips may be required in order to meet the requirement. The three-year minimum harvest requirement for Class C and D vessels is probably

not a substantial impediment for the larger vessels since less than one trip would normally land more than the required 5,000 lb (the average catch per trip for all vessels combined is ~33,000 lb of PMUS). Therefore, large American-Samoa-based vessels are expected to easily meet the current minimum harvest/landings requirement.

There are currently 15 dual American Samoa and Hawaii longline fishery permit holder. It is advantageous for a Hawaii-based longline fishery to hold a dual permit as dual permit holders may continue to fish on the high seas and land their catches into Hawaii when the WCPFC bigeye tuna catch limit is reached in the Western and Central Pacific Ocean. Dual permitted vessels usually hold Class C and D permits. These permit holders do not tend to make the minimum harvest requirements as they are unable to make the 5,000 miles to American Samoa to land 5,000 lb of Pelagic MUS over the three-year time frame given the economic cost that would be incurred. As a result, these permit holders often transfer their permit to new permittees or (in the case of fishermen with substantial history of participation) they could let their permit lapse and renew them immediately. This allows fishermen the opportunity to bypass the minimum harvest landings requirement. Permits can be “passed around” every couple of years without meeting any harvest requirements.

Alternative 2: Modification of American Samoa Longline Program

The largest effect on fishery participants under Alternative 2 relates to the proposed removal of the requirement to have past history in the fishery in order to qualify for a permit. Currently, there are likely younger fishermen in American Samoa who own vessels in the small vessel class that under the status quo are restricted from participating in the fishery because they do not have prior history. It has been 12 years since NMFS implemented the longline limited entry program and some of the fishermen who had documented participation in the fishery have since passed away. Their children may be interested in joining the fishery, but regulations may be excluding them from the fishery because they do not have documented participation. The Council and NMFS expect that removing the requirement for permit holders to document history in the fishery will expand opportunities for citizens and U.S. nationals to enter the fishery. The opportunities would be greatest for small vessel owners in American Samoa. The benefit may be reduced in American Samoa for large vessel owners if the available class C and D permits go to vessels participating in the Hawaii-based deep-set longline fishery.

Combining vessel classes would provide flexibility within the program and may attract some potential small boat participants because there would no longer be any uncertainty if Class B permits would become available in the future. Under the current permit system, if an individual had a Class A permit and wanted to upgrade to a Class B permit, the Class B permit has to be available, either from NMFS or by purchase or lease from another permit holder. Additionally, currently only Class A permit holders are allowed to transfer their permit to a family member. Class B permit holders are not allowed to transfer their permits to a family member. Under this alternative, and in line with the purpose and need of the proposed action to maintain community participation in the fishery, all permit holders in the new small vessel permit category will be able to transfer their permit to a family member. All other transfer criteria will remain the same.

Under this alternative, U.S. citizens and U.S. nationals would have the ability to qualify for an available permit within the total cap of 60 permits, but foreign nationals would not be eligible. This would restrict potential foreign applicants from obtaining a permit, which would reduce competition for permits. However, limiting permit ownership to U.S. citizens or nationals would also eliminate the potential for foreign nationals currently participating in the fishery (e.g., some crew) to obtain permits through transfer or sale. NMFS believes all vessel owners are U.S. citizens, so no vessel owner would lose their permit under the proposed change. The proposed action may encourage U.S. citizens and nationals from off-island to participate in the fishery, as owning a permit does not require the permit holder to establish residency in the Territory. However, the permit holder would be required to register a vessel to the permit within 120 days if it is an initial or additional permit.

Reducing the three-year minimum harvest requirement from 1,000 lb to 500 lb for small vessels could result in higher permit retention rates over time for those small vessels that may be having some economic or other difficulty to meet the minimum harvest requirements, as well as provide additional encouragement for those thinking about entering the small boat fleet. Reducing the minimum harvest requirements could allow some Class A and B permit holders to renew their permits when they otherwise would have to forfeit them. An average class A vessel lands 233 lb per trip and takes 59 trips annually. Therefore, similar to Alternative 1, it is expected that small vessels can meet the proposed minimum harvest requirement over a three year period. Additionally, if the minimum harvest requirement remains at 1,000 lb this could deter any potential new entrants due to the removal of the requirement for documented history in the fishery in order to obtain a permit. Overall, the lower minimum harvest for alia vessels would not represent an impediment to permit retention for an alia vessel and this would be an improvement over the current requirement.

The requirement to land the minimum harvest required under the two permit classes is likely to have the most impact on the holders of dual permits in the American Samoa and Hawaii longline fisheries. The dual permit holders would continue to have the ability to fish on the high seas and land in Honolulu when the WCPO US bigeye catch limit has been reached. They would, however, have to land the minimum required landing of PMUS in American Samoa to renew the permit within the three year period. These permit holders often transfer their permit to new permittees or (in the case of fishermen with substantial history of participation) they could let their permit lapse and renew them immediately. This allows fishermen the opportunity to bypass the minimum harvest landings requirement.

We do not expect the preferred alternative to result in a boom in new small vessel entrants. From 2015 – 2019, NMFS permitted an average of 11 Class A and B vessels out of a total of 22 permits available. Therefore, for analytical purposes, we anticipate there may be up to 11 new entrants fishing with small vessels as a result of the proposed action (i.e., new permit holders that were once ineligible to obtain a limited entry permit due to lack of prior history in the fishery). However, the participation in the small vessel fleet would likely remain low unless economic constraints that currently face the small vessel fleet are minimized, such as the requirement to only provide frozen fish for canning, increased cost of fuel, and declining revenues of the longline fishery.

4.2.1 Past, Present, and Reasonably Foreseeable Future Actions

American Samoa LVPA Exemptions

Federal regulations prohibit fishing within the Large Vessel Prohibited Area (LVPA) for vessels greater than 50 feet in length (generally within 50 nm of emergent lands) and commercial fishing within marine national monuments. During the peak of longline landings in 2002, NMFS created the LVPA to prevent the potential for gear conflicts and catch competition between larger and smaller vessels, as well as to preserve opportunities for fishing by alia vessels (NOAA 2017). In 2016, NMFS published an exemption to the LVPA rule to allow large U.S. vessels holding a Federal American Samoa longline limited entry permit to fish in portions of the LVPA (seaward of 12 nm around Swains Island, Tutuila, and the Manua Islands). However, the American Samoa government challenged the rulemaking, claiming the U.S. Government's action violated the "other applicable law" provision of the MSA by failing to consider the Deeds of Cession, which calls for the protection of cultural and property rights. NMFS disagreed with this interpretation and further noted that, in approving the amendment, effects of the LVPA exemption to fisheries in American Samoa were considered, with no expected adverse impacts to catches. Notwithstanding that 2016 catch data under the LVPA exemption showed no negative impacts to small coastal fisheries, in March 2017, the U.S. District Court vacated and set aside the LVPA exemption. In 2020, the 9th Circuit Court of Appeals found in favor of NMFS. In June 2021, the U.S. Supreme Court denied American Samoa Government's petition for certiorari. Rulemaking is currently pending to reinstate the LVPA exemption. If reinstated, large longline vessels would be able to fish in certain areas of the LVPA.

The proposed action is not expected to cause negative impacts to the American Samoa longline fishery in conjunction with the pending reinstatement of the LVPA exemption, since fishing activities and techniques will remain the same for all involved in the limited entry permit longline fishery. The Council would continue to review annual monitoring of the American Samoa longline and troll catch rates, small vessel participation, and local fisheries development initiatives throughout the archipelago and could implement management action, if it were necessary for the conservation and management of any fishery.

U.S. Territorial Catch and Fishing Effort Limits

On October 28, 2014, NMFS published the final rule for Amendment 7 to the Pelagic FEP (79 FR 64097), which implements a management framework for specifying catch and effort limits and accountability measures for pelagic fisheries in the U.S. Pacific territories of American Samoa, Guam, and the CNMI. From 2014 through 2019, the Council has used the territorial catch, effort and allocation limit measure to recommend annual longline bigeye catch limits of 2,000 t for each U.S. participating territory and recommended that each territory could allocate up to 1,000 t of that limit pursuant to specified fishing agreements. At its 178th meeting held June 25-27, 2019, in Honolulu, the Council considered and discussed issues relevant to bigeye tuna catch and allocation limits for the U.S. participating territories, including the most recent (2018) bigeye stock assessment, the recommendations of the SSC made at the 132nd SSC meeting held June 18-20, 2019, and other relevant information including recommendations from other advisory bodies. At its 181st meeting held March 10-12, 2020, in Honolulu, Hawaii, after considering information about the recent fishery performance, effects of Hawaii longline

fisheries on protected species, and public comments, the Council recommended a 2,000 t catch limit for each U.S. participating territory and that each can allocate up to 1,500 t of their catch limit through specified fishing agreements. The Council further recommended NMFS not authorize more than 3,000 t in total allocations in 2020.

4.2.2 Cumulative Effects on Fishery Participants and Fishing Communities

There are wide-ranging factors variable with time that impact overall levels of participation in a given fishery and its associated fishing communities. Current factors affecting participation in the American Samoa limited entry permit longline fishery include high fuel costs, costs of a fishing vessel and gear, reduced fish prices due to increased amounts of imported seafood, and technical limitations. High fuel costs affect fishing participants by increasing the expenses necessary to actually go fishing, for example. The consequences are that fishery participants take fewer overall fishing trips, switch to less fuel-intensive fisheries closer to shore, or simply do not go fishing. These effects are believed to have contributed to the decline of the small vessel alia portion of the American Samoa longline fishery. Without changes to the management of the Longline Limited Entry Program, small vessel participation and entry into the fishery by new participants is expected to be low.

While Alternative 2 is expected to allow up to 10 new entrants into the fishery, there is not expected to be any notable cumulative impacts on fishing participation within the American Samoa fishing community. The potential additive impacts in combination with past, present, and future actions as well as exogenous factors are not expected to result to any significant cumulative socio-economic impacts due to the administrative nature of the action.

4.3 Potential Effects on Target and Non-Target Stocks

4.3.1 Target Stocks

Alternative 1 – No Action / Status Quo

Under the No-action Alternative, provisions of the American Samoa longline limited entry program would not be modified and the fishery would continue operating under the existing regulations (50 CFR 665.816). Under the status quo, the current level of impacts to target species (e.g., albacore, yellowfin, bigeye) would continue. Catches of target stocks in the longline fishery would likely remain similar to previous years, and likely remain below historical peaks in catch and effort levels that occurred several years ago. Factors outside this action such as cost to fish would continue to affect effort, and catch rates would continue to be affected by variable oceanographic conditions and catch and effort of non-U.S. fleets targeting albacore and other pelagic MUS in the South Pacific region which influence catch rates of target stocks by the fleet.

We expect that there could be some growth in the alia fleet under the No-action alternative due to programs sponsored by the Council and the American Samoa longline association that are aimed at training interested people in how to longline fish. However, the participation in small vessel fleet would likely remain low unless economic constraints that currently face the small vessel fleet are minimized, such as the requirement to only provide frozen fish for canning, increased cost of fuel, and declining revenues of the longline fishery. In general, interest in the

smaller longline permit classes (A and B) is not expected to increase much without a change in some of the requirements.

At present, South Pacific albacore is not overfished or subject to overfishing and the trend for the American Samoa longline fishery is that fishing would remain sustainable even if the fishery were at full capacity. For example, the 2017 catch of albacore by the American Samoa longline fishery was approximately less than 2 percent of the total 2017 south Pacific albacore catch in the WCPO. The American Samoa longline fishery is not adversely affecting the viability of any target pelagic species. Even with a slight increase in fishing by alia vessels, we expect this alternative to maintain a low and sustainable impact to the South Pacific albacore stock and other target species.

Alternative 2 – Modification of the American Samoa Longline Program

As described in section 3, the WCPFC believes South Pacific albacore, yellowfin, and skipjack to be in healthy stock conditions. Bigeye tuna was experiencing overfishing, but the 2017 stock assessment suggests that the stock is no longer experiencing overfishing and is not overfished (McKechnie et al. 2016). For all of these stocks, the American Samoa longline fishery contributes minimally to stock impacts as a result of catches that are small percentages of regional catches. Under Alternative 2, the resultant level of impacts on target stocks in terms of local depletion is likely minimal and negligible in terms of stock status.

Based on current catch rates, and an estimated 60 trips per year for Class A vessels, an additional 11 small vessels fishing year-round would be capable of catching approximately 1,212,000 lb of tunas. However, the current catch rates are likely completed by remaining highliners in the small vessel fishery and future catch and effort levels would not be as high. Furthermore, even with the additional catch, the levels of catches would likely be sustainable when added to existing catches made by active vessels fishing in the U.S. EEZ around American Samoa. Under the consolidation of Class C and D permits, there could be an increase in hooks set. Currently, an average Class C vessel deploys approximately 65,000 hooks per set, makes 23 sets per trip, and takes 7 trips per year. In contrast, an average Class D vessel deploys 121,000 hooks per set, makes 41 sets per trip, and takes 4 trips per year. In other words, hook numbers could increase by approximately 13% under the new permit system if all 12 Class C vessel owners take advantage of the allowable increase in vessel size and upgrade to a 70+ ft vessel. However, due to the high cost of purchasing a larger vessel and recent declining revenue across the fishery, we do not anticipate that many Class C vessels will upgrade to a larger vessel.

Restricting eligibility to only those who are U.S. citizens or U.S. nationals is not expected to result in any additional impact to target species. Removing the eligibility requirement of prior fishing history would facilitate permit acquisition by people who have no prior fishing history, but because the number of permits in each size class would continue to be capped, and because many of the existing large permits are already subscribed, the proposed action is not expected to result in a large increase in harvest levels as described.

The minimum harvest requirement would remain the same for large vessels (5,000 lb / 3 years) and be reduced to 500 lb / 3 years for small vessels, thus the impacts to target stocks are expected

to remain the same or be slightly less. Additionally, the effects are expected to be below those identified during the implementation of the limited entry program in 2006 (WPFMC 2003). Under this alternative, the expected 11 new entrants in the fishery caught the minimum harvest amount, it would increase catch of PMUS by 5,500 lb over 3 years, or 1,833 lb annually. Therefore an increase in participation is unlikely to result in a large increase in harvest levels.

4.3.2 Non-Target Stocks

Alternative 1: No Action / Status Quo

Under the No-action Alternative the American Samoa longline limited entry program would remain unchanged and the fishery would continue operating under the existing regulations (50 CFR § 665.816), including minimum harvest requirements. This would maintain the current level of impacts to incidental species the fishery catches while longline fishing. Catches of incidental species, such as swordfish, blue marlin, moonfish, spearfish, mahimahi, wahoo, and striped marlin in the longline fishery would likely remain similar to previous years and factors outside this action greatly influence their stock status.

We do not expect that maintaining the four vessel class sizes and eligibility requirements to have any impacts on incidental species beyond what is already occurring. Catches of non-target stocks by the American Samoa longline fishery represent small percentages of total catches of the same stocks in the region. Several incidental catch species are retained for the local Pago Pago market or consumed on-board the vessel. Sharks are not retained, with most sharks caught returned alive to sea. The American Samoa longline fishery is not adversely affecting the viability of any non-target pelagic species.

Alternative 2: Modification of the American Samoa Longline Program

As stated in 4.3.1, the number of hooks in the U.S. EEZ could increase by 13% from the status quo for large vessels. However, there would be no increase in the number of available permits under this alternative. The minimum harvest requirement will remain the same under this alternative except for small vessels, thus the impacts to incidental stocks are expected to remain similar to Alternative 1 and are not expected to exceed those identified during the implementation of the limited entry program in 2006 (WPFMC 2003). If all permits in the small vessel class were active, the catch of non-target species could increase over recent levels. However, this alternative would also involve a reduction in the minimum harvest requirement from 1,000 lb to 500 lb for small vessels, which would mean that less fish would be required to be landed than originally analyzed for the limited entry program implementation.

Restricting eligibility to only those who are U.S. citizens or nationals is not expected to result in any additional impact to incidental species. Removing the eligibility requirement of prior fishing history will open the door to people interested in acquiring a permit who have no prior fishing history, but because the number of permits is not increasing, the impact will not be greater than the impact initially analyzed for the implementation of the limited entry program.

While there is no potential for an increase in the number of large vessels participating in the fishery, there is potential for all current Class C vessels to “size up” to a Class D vessels under

this alternative as described above. Bycatch of non-target species such as thresher sharks, shortfin mako sharks, and oilfish are currently minimal (Table 8). Even if all Class C vessels upgraded to a larger vessel, the amount of bycatch would still remain minimal. However, due to the high cost of purchasing a larger vessel and recent declining revenue across the fishery, we do not anticipate that many Class C vessels will upgrade to a larger vessel. Therefore, the resultant level of impacts on bycatch species will continue to be similar to recent years.

4.3.3 Past, Present, and Reasonably Foreseeable Management Actions on Target and Non-Target Stocks

Pelagic FEP

For a list of measures implemented under the Pelagic FMP and FEP, see <http://www.wpcouncil.org/fishery-ecosystem-plans-amendments/>.

NMFS Management Actions

In 2019, PIFSC completed a benchmark stock assessment (Langseth et al. 2019) that determined that in 2017 the bottomfish multispecies stock complex in American Samoa was overfished and subject to overfishing. In response to this assessment, the Council requested that NMFS take Secretarial action under Section 304(e)(6) to reduce overfishing in fishing year 2020 while it develops a rebuilding plan. NMFS recently implemented a bottomfish interim (180 days) measure which includes provisions for closing Federal waters to bottomfish fishing when an interim catch limit of 13,000 lb has been caught. These measures are expected to be extended for another 190 days. The Council is developing a rebuilding plan for the American Samoa bottomfish stock complex. One of the potential cumulative effects of this action on the longline fishery under Alternatives 1 and 2, is it is possible that some alia vessel owners might be more interested in participating in longline fishing than in bottomfish fishing. This is the source of some growth under Alternatives 1 and 2. The measure otherwise would not have any implications for cumulative impacts on marine resources under either alternative.

Longline and Bottomfish Fresh Fish Projects

In an effort to explore the viability of an expansion of the local fresh fish market, the American Samoa Advisory Panel submitted a project proposal to the Council in early 2019 to assist large longlining vessels in testing its capability to dedicate the last few days of albacore fishing trips to catch fresh fish. The Department of Marine and Wildlife Resources, with the assistance of the Council and NMFS, will implement a longline fresh fish demonstration project, which will support a specified number of vessels in the fleet being able to produce ice on-board to support a fresh fish product. The project will allow the fleet to get a better idea of the viability of the fresh fish market in American Samoa as a supplemental means of fishing in addition to delivering catch to the cannery (WPFMC 2019b).

4.3.4 Exogenous Factors Affecting Target and Non-Target Species

Variability in the Pelagic Environment

Catch rates of pelagic fish species vary over both time and space in relation to environmental factors (e.g., temperature) that influence the horizontal and vertical movement patterns and distribution of fish. Cyclical fluctuations in the pelagic environment affect pelagic habitats and prey availability at both high frequency (e.g., seasonal latitudinal extension of warm ocean waters) and low-frequency (e.g., El Niño-Southern Oscillation-related longitudinal extension of warm ocean waters). Low or high levels of recruitment of pelagic fish species are also strongly related to variation in the ocean environment.

The effects of such fluctuations on the catch rates of MUS, such as South Pacific swordfish, obscure the effects of the combined fishing effort from Pacific pelagic fisheries. During an El Niño, for example, the purse seine fishery for skipjack tuna shifts over 1,000 km from the western to central equatorial Pacific in response to physical and biological impacts on the pelagic ecosystem (Lehodey et al. 1997). Future ocean shifts are likely to cause changes in the abundance and distribution of pelagic fish resources, which could contribute to cumulative effects. For this reason, accurate and timely fisheries information is needed to produce stock assessments that allow fishery managers the ability to regulate harvests based on observed stock conditions.

Climate Change and Ocean Productivity

The global mean temperature has risen 0.76° C over the last 150 years, and the linear trend over the last 50 years is nearly twice that for the last 100 years (IPCC 2007; IPCC 2014). Climate change effects are already being observed in a wide range of ecosystems and species from all regions of the world (Walther et al. 2002; Rosenzweig et al. 2008). There is high confidence, based on substantial new evidence, that observed changes in marine systems are associated with rising water temperatures as well as related changes in ice cover, salinity, oxygen levels, pH(acidity), and circulation. These changes include shifts in ranges and changes in algal, plankton, and fish abundance (IPCC 2007; IPCC 2014).

Climate change is not known to have a large impact on fish stocks harvested by the American Samoa longline fishery in terms of biomass or recruitment. In the future, it is possible that climate change may lead to changes in the distribution of tuna and other pelagic species. The Council and NMFS will continue to consider impacts of climate change on fish stocks under its management purview and will include consideration of these impacts in stock assessments and fishery management actions. Monitoring of stock status will continue going forward, and impacts to stocks that might be occurring as a result of climate change are likely to be detected on a regional level (e.g., WCPO).

4.3.5 Cumulative Effects Analysis on Target and Non-Target Stocks

The American Samoa longline fishery is capped at 60 vessels under the limited entry program, but only 28 vessels (mostly in Classes C and D) have been active. Alternative 2 will not result in changes in how the fishery operates in terms of gear types used, areas fished, level of catch or

effort, and target and non-target stocks. The potential additive impacts of Alternative 2 in combination with the impacts of past, present, and future actions as well as exogenous factors are not expected to result in any significant cumulative impacts on target and non-target stocks.

4.4 Potential Effects on Protected Species

Alternative 1: No Action / Status Quo

Under the No-action Alternative, the American Samoa longline limited entry program would remain unchanged. Therefore, we do not expect the current fishery to have any additional impacts to protected species beyond those authorized by NMFS. Currently the American Samoa longline fishery has the potential to interact with protected species, including sea turtles, marine mammals, a listed shark species, and seabirds. In accordance with the ESA and MMPA, the fishery has undergone reviews to evaluate impacts and, if appropriate, to authorize a level of interaction that will ensure the fishery will not prevent the survival and continued recovery of listed species, or the conservation of other protected species. In 2011, NMFS issued gear modification regulations to reduce the number and severity of interactions with sea turtles in the American Samoa longline fishery (see Amendment 5 to the Pelagics FEP). We believe the gear modification requirements to be effective in reducing green sea turtle interactions in the fishery. Under the No-action alternative, there could be some increase in alia participation in the longline fishery if some alia fishermen from the bottomfish fishery start to participate. We don't expect a lot of new participation by alia vessels, however, given the continuing barriers to sustained participation the proposed action attempts to address.

Alternative 2: Modification of the American Samoa Longline Program

This alternative would likely increase fishing effort in the small vessel class relative to recent years; this effort, however, would likely be much lower than the start of the limited entry program in 2006 because of the continuing economic challenges to joining and remaining in the fishery. For example, total effort in the fishery was highest in 2007, whereby NMFS authorized associated take levels for protected species. The Council expects up to an additional 11 permitted small longline vessels to operate in the fishery in the near future. Vessels greater than 40 ft in length (e.g., Class B, C, and D vessels) are currently subject to FEP regulations where longline gear is fished at depths below 100 m to reduce the potential for interactions with green sea turtles. Class A vessels are currently not required to configure gear so that the first hook fishes below 300 ft (100m), and there is some potential for increased interactions with sea turtles due to greater alia activity. Alia fishermen are required to report interactions with sea turtles and NMFS has no information that alia vessels interact with sea turtles as a result of their gear configuration. Vessels that are issued a small vessel permit but are longer than 40 ft in length will still be subject to the same protected species requirements, including submitting logbooks, carrying observers, and gear configuration.

If the current Class C vessels “size up” to Class D vessels, large vessel participation may increase. However, given the high cost to upgrade and declining revenue in the fishery, we do not expect many current Class C vessels to upgrade to larger vessels. Therefore, we do not expect the number of hooks to significantly increase and the potential for protected species interactions would not be greater than those associated with authorized levels.

4.4.1 Past, Present, and Reasonably Foreseeable Management Actions

Table 9 provides the ESA-listed species with potential to interact with the American Samoa longline fishery, and Table 19 lists the history of ESA consultations in the fishery. On April 3, 2019, NMFS reinitiated Section 7 consultation for the American Samoa longline fishery due to exceedance of the 3-year sea turtle ITS, and the recent listing of the oceanic whitetip shark, giant manta ray, and chambered nautilus.

4.4.2 Exogenous Factors Affecting Sea Turtles and Marine Mammals

Existing threats that are common to all species of sea turtles include:

- Human use and consumption- legal and illegal harvest of adults, juveniles and/or eggs
- Sea turtle nesting and marine environments, including directed takes, predation, and coastal habitat development
- Marine debris (entanglement and ingestion)
- Incidental capture in fisheries (trawl, gillnet and longline)
- Fluctuations in the ocean environment
- Implications of climate change

External factors affecting other marine mammals such as whales and dolphins include the following: (a) incidental take in fisheries; (b) collisions with ship traffic, ship disturbance, and ship noise, and (c) marine debris and waste disposal. NMFS takes these factors into account when authorizing take levels associated with interactions that occur within the American Samoa longline fishery.

4.4.3 Cumulative Effects on Protected Species

The American Samoa longline fishery is capped at 60 vessels under the limited entry program, but around thirteen vessels (one in Class A; 12 in Classes C and D) were active in 2018. Cumulative effects of the U.S. fleets have been considered and authorized in the BiOps that apply to the domestic longline and other pelagic fisheries in the western Pacific. Based on the 2015 BiOp, existing levels of interactions are not anticipated to jeopardize the continued existence of protected species that occur within the area operation of the American Samoa longline fishery. Fishing effort levels are expected to be similar to recent years and interactions under multi-year catch or allocation limits are not expected to be higher than those currently authorized or analyzed by NMFS Table 19). Alternative 2, when added to the impacts of past, present, and future actions, and exogenous factors, is not expected to result in any significant cumulative impacts on protected species. Therefore, impacts to protected species are not expected to change under all alternatives.

4.5 Potential Effects on Enforcement and Administration

Alternative 1: No Action / Status Quo

Under the No-action Alternative, administration and enforcement of the longline limited entry program would continue. Therefore, we do not expect to have any additional or new impacts on enforcement or administration. The administrative burden associated with issuing and

transferring permits based on four vessel class sizes would continue. This includes verification of minimum harvest for permit holders requesting permit renewals, review of documented participation in the fishery to verify eligibility for new applications, renewals, and transfers and to resolve competitions for permits, and tracking permit expiration status.

The program does not result in a large burden on law enforcement. Permit applicants must provide documentation indicating their eligibility to qualify for permits. An American Samoa limited entry longline permit is required to fish using longline gear in waters around American Samoa.

Alternative 2: Modification of the American Samoa Longline Program

Regarding the consolidation of vessel class sizes to small and large under Alternative 2, additional impacts to enforcement would not be expected because consolidating the vessel class sizes would not be an enforcement issue. There would be some increased administrative burden to establish the two new vessel size classes and implement the modification of current permits.

Regarding eligibility requirements, there is not expected to be an impact on enforcement. However, there will be an increased administrative burden when reviewing proof of citizenship for permit applications and permit transfers. The administrative burden would be reduced with the removal of proof of prior fishery history; however, since the Council recommended retaining prior fishery participation for prioritizing permit applications, the administrative burden will likely be similar to the no-action alternative.

No additional or reduced impacts to enforcement or administration would result from this alternative with the change in minimum harvest requirements for small vessels from 1,000 lb to 500 lb. Administrative burden would continue as NMFS would continue to review minimum harvest requirements in terms of approving or disapproving permit renewal. The transfer or swapping of permits is not likely to add a significant burden to NMFS, since these are the type of regular transactions monitored by the NMFS permit officer. There may be a limited amount of additional work in computing the minimum harvest requirement pro-rated volume of fish in the event of a swap or transfer during the three-year span of an eligible permit.

4.6 Potential Effects on Marine Protected Areas and Other Marine Resources

In the past, prior to the establishment of the LVPA and the Rose Atoll Marine National Monument, there were no reported incidents of gear loss or vessel groundings. As a result, longline fishing under the No Action Alternative has not had any discernable impact on resources in the American Samoa National Marine Sanctuaries or the Rose Atoll Marine National Monument, and longline fishing in these areas would continue to be restricted by territorial and Federal laws, so none of these areas would be impacted. Fishing in general would continue to be subject to Federal logbook reporting, satellite vessel monitoring system (VMS), and observer placement to help to ensure the sustainability of marine resources. Neither alternative is expected to have adverse impacts on EFH, HAPC, marine protected areas (MPAs), marine sanctuaries, or marine monuments, or other vulnerable marine or coastal ecosystems.

Longline fishing around American Samoa is not known to be a potential vector for spreading alien or invasive species as most vessels fish within the U.S. EEZ around American Samoa.

Vessels that fish under dual permits and that travel from Hawaii to make the required minimum harvest landings in American Samoa are already making the trip, and would continue to do so under the proposed action. Because there would not be a large change to fishing operations, and because vessels are already traveling between Hawaii and American Samoa, neither alternative is expected to increase the potential for the spread of alien species into or within American Samoa waters.

To date, there have been no identified impacts to marine biodiversity and/or ecosystem function from the American Samoa longline fishery, and neither alternative is expected to result in impacts to these environmental features. The impacts of a slightly expanded small to medium sized vessel sector of the fishery would be sustainable in terms of catch of fish stocks and would not result in large changes to interactions with protected species above the levels already considered through past and ongoing consultations. Therefore, we conclude the proposed alternatives would not result in major changes to the American Samoa longline fishery and would not have large adverse impacts to marine biodiversity or ecosystem function.

There are no known districts, sites, highways, structures or objects that are listed in or eligible for listing in the National Register of Historic Places within Federal waters of American Samoa where longline fishing activities are conducted. Additionally, longline fishing activities are not known to result in adverse impacts to scientific, historic, archeological or cultural resources because fishing activities occur generally miles offshore.

None of the alternatives would change requirements for longline fishing gear or deployment. The USCG and the NOAA OLE would continue to enforce gear-related regulations including length of float lines and the distance between hooks and floats and other gear requirements. Neither alternative would threaten a violation of Federal, state, or local law or requirements imposed for environmental protection.

4.7 Potential Effects on Essential Fish Habitat

Pelagic fisheries generally operate dozens to a thousand miles offshore to target pelagic fish species in the water column. In American Samoa, Federal regulations prohibit all fishing vessels greater than 50 ft. in length, including longline vessels, from fishing within 50 nm of the shoreline. To access fishing grounds, pelagic fishing vessels have to transit areas where EFH may occur. While pelagic troll vessels may deploy surface lures during transit, the activity does not occur in coral reef habitat. Pelagic longline vessels do not deploy gear in transit. Additionally, pelagic fishing activities do not involve anchoring and, therefore, the potential for anchor damage during fishing activities is not an issue.

4.8 Other Potential Effects

The proposed action is not expected to have impacts (adverse or beneficial) that would set a precedent for future actions with significant effects. Our analysis of environmental effects shows that the proposed changes would not result in a large change to fishing, although we expect a slight expansion of vessels less than 50 feet to participate in the fishery due to reducing barriers preventing new entries into the fishery. The proposed action would not narrow future

management options and future changes, if any, would be examined for environmental and fishery impacts, as necessary.

Similarly, none of the described alternatives are likely to have effects that are highly controversial or that involve substantial risk or unknown outcomes. It is unlikely that the effects of the described alternatives involve unknown or unforeseen risks given the straightforward nature of the fishery, long history of fishing under the program, its preferred targets, and the amendment itself. It is also unlikely that any of the described alternatives would establish precedent in making future changes to the American Samoa longline permit program as each management action is considered at the time it is proposed through Council deliberative process and public input. Due to the potentially small increase in the small vessel fleet and the limited greenhouse gas emissions emitted by alia vessels, the proposed action is not expected to increase greenhouse gas emissions.

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APPENDIX A. Draft Proposed Regulations

§ 665.816 American Samoa Longline Limited Entry Program

(a) *General.* Under §665.801(c), certain U.S. vessels are required to be registered for use under a valid American Samoa longline limited access permit. The maximum number of permits will be capped at 21 permits in the small vessel class and 39 permits in the large vessel class.

(b) *Terminology.* For purposes of this section, the following terms have these meanings:

(1) Documented participation means participation proved by, but not necessarily limited to, a properly submitted NMFS or American Samoa logbook, an American Samoa creel survey record, a delivery or payment record from an American Samoa-based cannery, retailer or wholesaler, an American Samoa tax record, an individual wage record, ownership title, vessel registration, or other official documents showing:

(i) Ownership of a vessel that was used to fish in the EEZ around American Samoa, or

(ii) Evidence of work on a fishing trip during which longline gear was used to harvest western Pacific pelagic MUS in the EEZ around American Samoa. If the applicant does not possess the necessary documentation of evidence of work on a fishing trip based on records available only from NMFS or the Government of American Samoa (e.g., creel survey record or logbook), the applicant may issue a request to PIRO to obtain such records from the appropriate agencies, if available. The applicant should provide sufficient information on the fishing trip to allow PIRO to retrieve the records.

(2) Family means those people related by blood, marriage, and formal or informal adoption.

(c) Vessel size classes. The Regional Administrator shall issue American Samoa longline limited access permits in the following size classes:

(1) Small Vessel Class: Vessels less than 50 ft (15.23 m) LOA. The maximum number of permits allowed in this class is 21.

(2) Large Vessel Class: Vessels equal to or longer than 50 ft (15.24 m) LOA. The maximum number of permits allowed in this class is 39.

(d) A vessel subject to this section may only be registered with an American Samoa longline limited access permit of a size class equal to or larger than the vessel's LOA.

(e) Permit qualification. Any U.S. national, U.S. citizen, or U.S. company, partnership, or corporation qualifies for an American Samoa longline limited access permit. NMFS may require additional documentation it deems necessary to determine eligibility for a permit.

(f) Permit period. An American Samoa longline limited access renewed or additional (re-issued) permit shall expire three years after the date of issuance.

(g) Permit Re-issuance or Additional Permit Issuance.

(1) If the number of permits issued in the small or large vessel class falls below the maximum number of permits, the Regional Administrator shall publish a notice in the Federal Register, send notices to persons on the American Samoa pelagic mailing list, and use other means to notify prospective applicants of any available permit(s) in that class. Any application for issuance of an additional permit must be submitted to PIRO no later than 90 days after the date of publication of the notice on the availability of additional permits in the Federal Register. A complete application must include documented participation in the fishery in accordance with §665.816(b)(1). The Regional Administrator shall issue permits to persons according to the following priority standard:

(i) First priority accrues to the person with the earliest documented participation in the pelagic longline fishery in the EEZ around American Samoa on a vessel 40 feet or shorter in length.

(ii) The next priority accrues to the person with the earliest documented participation in the pelagic longline fishery in the EEZ around American Samoa on a vessel less than 50 feet in length, on a vessel less than 70 feet in length, or on a vessel 70.1 feet or greater, in that order.

(iii) In the event of a tie in the priority ranking between two or more applicants, the applicant whose second documented participation on a subsequent trip in the pelagic longline fishery in the EEZ around American Samoa is first in time will be ranked first in priority. If there is still a tie between two or more applicants, the Regional Administrator will select the successful applicant by an impartial lottery.

(2) Applications must be made, and application fees paid, in accordance with §§665.13(c)(1), 665.13(d), and 665.13(f)(2). If the applicant is any entity other than a sole owner, the application must be accompanied by a supplementary information sheet, obtained from the Regional Administrator, containing the names and mailing addresses of all owners, partners, and corporate officers that comprise ownership of the vessel for which the permit application is prepared.

(3) Within 30 days of receipt of a completed application, the Assistant Regional Administrator for Sustainable Fisheries shall make a decision on whether the applicant qualifies for a permit and will notify the successful applicant by a dated letter. The successful applicant must register a vessel of the equivalent vessel size or smaller to the permit within 120 days of the date of the letter of notification. The successful applicant must also submit a supplementary information sheet, obtained from the Regional Administrator, containing the name and mailing address of the owner of the vessel to which the permit is registered. If the registered vessel is owned by any entity other than a sole owner, the names and mailing addresses of all owners, partners, and corporate officers must be included. If the successful applicant fails to register a vessel to the permit within 120 days of the date of the letter of notification, the Assistant Regional Administrator for Sustainable Fisheries shall issue a letter of notification to the next person on the priority list or, in the event that there are no more

prospective applicants on the priority list, re-start the issuance process pursuant to paragraph (g)(1) of this section. Any person who fails to register the permit to a vessel under this paragraph (g)(3) within 120 days shall not be eligible to apply for a permit for 6 months from the date those 120 days expired.

(4) An appeal of a denial of an application for a permit shall be processed in accordance with §665.801(o).

(5) If a permit is relinquished, revoked, or not renewed pursuant to paragraph (j)(1) of this section, the Regional Administrator shall make that permit available according to the procedure described in paragraph (g) of this section.

(h) Permit transfer. The holder of an American Samoa longline limited access permit may transfer (by sale, gift, bequest, intestate succession, barter, or trade) the permit to another individual, partnership, corporation, or other entity as described in this section and eligible under the description in paragraph (e) of this section. Applications for permit transfers must be submitted to the Regional Administrator within 30 days of the transfer date. If the applicant is any entity other than a sole owner, the application must be accompanied by a supplementary information sheet, obtained from the Regional Administrator, containing the names and mailing addresses of all owners, partners, and corporate officers. After such an application has been made, the permit is not valid for use by the new permit holder until the Regional Administrator has issued the permit in the new permit holder's name under §665.13(c).

(1) When a permit is transferred before it expires, the permit period does not restart. The transferred permit issued by NMFS has the same expiration date as the original permit.

(2) Applications must be made, and application fees paid, in accordance with §§665.13(c)(1), 665.13(d), and 665.13(f)(2). If the applicant is any entity other than a sole owner, the application must be accompanied by a supplementary information sheet, obtained from the Regional Administrator, containing the names and mailing addresses of all owners, partners, and corporate officers that comprise ownership of the vessel for which the permit application is prepared.

(3) Within 30 days of receipt of a completed application, the Assistant Regional Administrator for Sustainable Fisheries shall make a decision on whether the applicant qualifies for a permit and will notify the successful applicant by a dated letter. The successful applicant must register a vessel of the equivalent vessel size or smaller to the permit within 120 days of the date of the letter of notification or before the transferred permit expires. The successful applicant must also submit a supplementary information sheet, obtained from the Regional Administrator, containing the name and mailing address of the owner of the vessel to which the permit is registered. If the registered vessel is owned by any entity other than a sole owner, the names and mailing addresses of all owners, partners, and corporate officers must be included. If the successful applicant fails to register a vessel to the permit within 120 days of the date of the letter of notification or before the transferred permit expires, the Assistant Regional Administrator for Sustainable Fisheries may re-start the issuance process pursuant to paragraph (g)(1) of this section.

(4) An appeal of a denial of an application for a permit shall be processed in accordance with §665.801(o).

(5) If a permit is relinquished, revoked, or not renewed pursuant to paragraph (i)(1) of this section, the Regional Administrator shall make that permit available according to the procedure described in paragraph (g) of this section.

(i) Permit renewal and registration of vessels.

(1) Use requirements. An American Samoa longline limited access permit will not be renewed if the vessel(s) the permit holder has registered to the permit failed to meet the minimum harvest requirement specified below within three consecutive years after the renewed or additional permit (g) date of issuance (coincides with permit period):

(i) For small vessel class permit: a total of 500 lbs (455 kg) of western Pacific pelagic MUS caught using longline gear and landed in American Samoa, or

(ii) For large vessel class permit: a total of 5,000 lb (2,273 kg) of western Pacific pelagic MUS caught using longline gear and landed in American Samoa.

(2) Exemption to use requirements. If the current permit holder (transferer) has met the minimum harvest requirements specified in (1) above and transfers the permit before the permit expires, the applicant who receives the permit (transferee) is exempt from meeting the minimum harvest requirement to renew the permit.

(3) Use requirements for transferred permits. If a permit is transferred and the transferer has not met the minimum harvest requirement before the transfer date, the permit transferee must meet the use requirements specified in (1) above on a pro-rated basis to renew the permit. The formula for the pro-rated minimum harvest requirement is: transferor.

Remaining harvest amount = product of percentage of time left within the three-year permit period and the minimum harvest amount.

Days remaining in transferred permit effective period (from transferred permit date of issuance to original permit date of expiration)/1095 (days in three calendar years) X 500 lb for small vessel class OR 5,000 lb for large vessel class = pro-rated minimum harvest requirement for transferred permit

(j) Concentration of ownership of permits. No more than 10 percent of the maximum number of permits, of all size classes combined, may be held by the same permit holder. Fractional interest will be counted as a full permit for the purpose of calculating whether the 10-percent standard has been reached.

APPENDIX B. Regulatory Impact Review

Proposed Rule; Amendment 9 to the Fishery Ecosystem Plan for Pelagic Fisheries of the Western Pacific; Modifications to the American Samoa Longline Fishery Limited Entry Permit Program

(RIN 0648-BH65)

1. Introduction

This document is a regulatory impact review (RIR) prepared under Executive Order (E.O.) 12866, “Regulatory Planning and Review.” The regulatory philosophy of E.O.12866 stresses that, in deciding whether and how to regulate, agencies should assess all costs and benefits of all regulatory alternatives and choose those approaches that maximize the net benefits to society. To comply with E.O. 12866, NMFS prepares an RIR for regulatory actions that are of public interest. The RIR provides an overview of the problems, policy objectives, and anticipated impacts of regulatory actions. The regulatory philosophy of E.O. 12866 is reflected in the following statement:

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 shall 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 nevertheless 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.

The proposed action would consolidate vessel class sizes under the American Samoa longline permit, modify permit eligibility requirements, and reduce the minimum harvest requirements for small vessels.

2. Problem Statement and Management Objective

The purpose of this action is to reduce the complexity of the limited entry program and to modify the limited entry program requirements to provide for and enhance sustained community and indigenous American Samoan participation in the small vessel longline fleet.

3. Description of the American Samoa Longline Fishery

A Federal longline fishing permit is required for any vessel used in commercially fishing for pelagic management unit species (PMUS) in the EEZ around American Samoa. Vessels engaged in the fishery range from alia less than 40 feet (ft) in length to large vessels over 70 ft. The primary target species of these longline vessels is South Pacific albacore tuna, which are sold frozen to the fish processing industry in Pago Pago. In response to concerns voiced by alia fishermen that an uncontrolled influx of large vessels could result in adverse impacts to local stocks and the small vessel fleet, NMFS and the Council implemented a limited entry program for the American Samoa longline fishery in 2005 which capped the fishery at 60 federal permits annually. Permits were issued based on vessel length, as follows:

- Class A Permits— less than or equal to 40 ft
- Class B Permits— over 40 ft to 50 ft
- Class C Permits— over 50 ft to 70 ft
- Class D Permits— over 70 ft

Initial permit holders were required to be U.S. citizens or nationals and have documented landings of PMUS harvested from the U.S. EEZ around American Samoa prior to March 22, 2002. Currently, permits that become available or are transferred can be acquired by individuals who are not U.S. citizens or nationals. Permits are valid for three years from date of issuance and may be renewed.

At the time the limited entry program was implemented, the majority of the alia participating in the fishery were owned and operated by American Samoans. Over time, the composition of the fleet and the individuals holding permits has changed and fluctuated (Table 3). Since 2006, most of the alia have stopped fishing and, in 2019, there were only three active Class A and B vessels in the fleet. Participation by large vessels was somewhat stable through 2014, but has declined and remained below 20 active vessels annually since then. There were 14 active Class C and D vessels in 2019. Historically, only one percent of the total PMUS catch was attributed to vessels less than 50 ft in length fishing within 50 miles of shore. In 2019, the fishery landed 2.9 million lb, which was the lowest landings in the past decade. The estimated landed value was \$3.9 million; albacore comprised 89% of the total landed value.

More detail on the fishery can be found in Chapter 3 of the Environmental Assessment (EA), which evaluates the potential effects of modifying the American Samoa longline fishery limited entry permit program.

4. Description of the Alternatives

4.1 Alternative 1: No Action / Status Quo

Under Alternative 1, NMFS and the Council would not modify the provisions of the American Samoa limited entry longline fishery. Please see Section 2.2.1 of the Environmental Assessment (EA) in support of this action for more details on the status quo.

4.2 Alternative 2: Modify the American Samoa Longline Limited Entry Permit Program

Under Alternative 2, NMFS would modify the American Samoa longline permit program as follows:

Vessel Class Size: Under Alternative 2, the four existing vessel size classes would be replaced with two vessel class sizes. Vessels currently classified as Class A and B vessels would be classified as “small” and vessels currently classified as Class C and D vessels (equal to or greater than 50 ft) would be classified as “large.”

Eligibility Criteria: Under Alternative 2, permit eligibility would be limited to U.S. citizens and nationals, with no other qualifying criteria (i.e., documented history in the fishery would no longer be required). Additionally, permit holders can only transfer permits to U.S. citizens and U.S. nationals.

Minimum Harvest Requirements: Under Alternative 2, the three-year minimum pelagic MUS harvest requirement for small vessels (previously Class A and B) would be reduced from 1,000 lb to 500 lb, but still landed in American Samoa. The three-year minimum harvest requirement for large vessels (previously Class C and D) would remain at 5,000 lb. This alternative would not require fishermen to take their minimum harvest within the U.S. EEZ around American Samoa, but the minimum harvest amount must be landed in American Samoa. Further, the minimum harvest period would not restart in the event of a permit transfer. The new permit owner would be required to meet the harvest requirement based on the following formula: the product of percentage of time left within the three-year permit period and the minimum harvest amount.

5. Analysis of Alternatives

This section describes potential economic effects of Alternatives 1 and 2 and evaluates the impacts of the action alternative compared to the status quo. Section 4.2 of the EA in support of this action provides more details on the potential economic effects.

5.1 Alternative 1: No ACL and AM Management (No Action Alternative)

Under the No-action Alternative, there would be no changes to the limited entry program and therefore no new impacts to fishers or the fishing community of American Samoa. Current regulations limit transfers of permits to individuals or an American Samoan community member, and also allow for Class A vessels to transfer the permit to a family member. New entrants are required to have a documented history of participation in the fishery. Small and large vessels entrants would continue to encounter potential barriers in either entering the fishery. With regard to renewing longline permits, the current landing requirements would continue to apply, which might result in some participants being unable to renew their permits due to external factors. Class A and Class B vessels would need to land 1,000 lb and Class C and Class D vessels to land 5,000 lb of pelagic MUS in American Samoa over three consecutive years in order to renew their permit. Operators of smaller vessels, in particular, might have an especially difficult time in recovering from events that affect their fishing activities, as was the case for the 2009 tsunami that had caused damage to many small (and large) longline vessels. Fishermen who are unable to meet current eligibility or renewal requirements would not be able to apply for available permits or renew their permits.

5.2 Alternative 2: Modify the American Samoa Longline Limited Entry Permit Program

Vessel Class Size

Modifying the number of vessel size classes from four to two would provide flexibility within the program. As a result, the fishery might attract potential small boat participants because there would no longer be any uncertainty regarding the availability of larger “small” vessel permits (or Class B permits under status quo). Under the status quo (Alternative 1), a Class B permit must be freely available, either from NMFS or through purchase/lease from another permit holder, in order for a Class A vessel permittee to upgrade.

Eligibility Requirement

Implementing Alternative 2 would remove the historical landings requirement in order to qualify for a permit. This would likely enhance participation in the fishery, particularly among smaller vessels. There may be younger fishermen in American Samoa who own vessels in the small vessel class that under the status quo are restricted from participating in the fishery because they do not have prior history in the fishery. NMFS implemented the longline limited entry program over a decade ago, and some of the fishermen with documented participation in the fishery are no longer active in the fishery. NMFS expects the effect of this alternative would enable new entrants fishing with small vessels to participate in the fishery (i.e., new permit holders that were once ineligible to obtain a limited entry permit due to lack of prior history in the fishery). Alternative 2 would also limit permit ownership to U.S. citizens or nationals. This would eliminate the potential for foreign nationals currently participating in the fishery (e.g., some

crew) to obtain permits. Compared to the Alternative 1, under Alternative 2, allowing permit transfers to persons without documented history in the fishery could result in increased participation among small vessel owners and increased demand for Class C and D permits.

Minimum Harvest Requirements

Although the minimum harvest requirement for the small vessels may not seem significant, alia vessels typically only make one set per trip due to range and hold capacity limitations, with an average of 244 lb caught per longline set. Maintaining minimum harvest requirements of 1,000 lb (Classes A and B, under status quo) and 5,000 lb (Classes C and D under status quo) could result in some participants being unable to renew their permits. Reducing the three-year minimum harvest requirement from 1,000 lb to 500 lb for small vessels could result in higher permit retention rates over time for those small vessels that may be having some economic or other difficulty to meet the minimum harvest requirements, as well as provide additional encouragement for those thinking about entering the small boat fleet.

Catch from the American Samoa longline fishery primarily consists of albacore, which is often sold to the local tuna cannery, especially by the large longline vessels. While the tuna cannery remains a large part of the American Samoa economy, the vast majority of the fish landed and sold are those caught by large purse seine vessels, with longline vessels providing a small share of catch sold to canneries. Alias that use longlines or troll can sell catch to the cannery, however the cannery will only purchase frozen fish. Since alia vessels are not equipped with freezers, vessel owners must land their catch and then freeze it onshore before they are able to sell to the cannery. As a result, any expansion of the small boat longline fishery that may result from implementing Alternative 2 is likely to result in a negligible effect on the quantity of overall catch sold to the cannery as well as the quantity of tuna sold to final consumers of canned tuna. There might be minor effects in terms of the amount of non-commercial catch shared and consumed within the American Samoa community in implementing Alternative 2. Because fishing is such an integral part of the culture, it is difficult to cleanly separate commercial from non-commercial fishing, with most trips involving multiple motivations and multiple uses of the fish caught. This might especially be true for the smaller vessels participating in the American Samoa longline fishery (Kleiber and Leong, 2018; 2019 Pelagics SAFE Report; 2019 American Samoa FEP SAFE Report)

5.6 Determination of Significant Regulatory Action

Pursuant to E.O. 12866, a regulation is considered a “significant regulatory action” if it is expected to result in: (1) an annual effect 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 or 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. Based on the information provided above, this regulatory action was determined to not be economically significant for the purposes of E.O. 12866.

Kleiber D, Leong K. 2018. Cultural fishing in American Samoa. Pacific Islands Fisheries Science Center, PIFSC Administrative Report H-18-03, 21 p.

WPRFMC, 2020. Annual Stock Assessment and Fishery Evaluation Report for the American Samoa Archipelago Fishery Ecosystem Plan 2019. Remington, T., Sabater, M., Ishizaki, A. (Eds.) Western Pacific Regional Fishery Management Council. Honolulu, Hawaii 96813 USA. 141 pp. + Appendices.

WPRFMC, 2020. Annual Stock Assessment and Fishery Evaluation Report Pacific Island Pelagic Fishery Ecosystem Plan 2019. Remington, T., Fitchett, M., Ishizaki, A., DeMello, J. (Eds.) Western Pacific Regional Fishery Management Council. Honolulu, Hawaii 96813 USA. 372 pp. + Appendices.