Regulatory Amendment

Modifications to the American Samoa Large Vessel Prohibited Areas

including an Environmental Assessment and Regulatory Impact Review

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Abstract

There are two large vessel prohibited areas (LVPA) within the U.S. Exclusive Economic Zone (EEZ) around American Samoa that extend approximately 50 nautical miles (nm) from shore. Fishing for pelagic species with vessels 50 feet and longer has been prohibited in these areas since they were implemented in 2002. In 2009, President George W. Bush established the Rose Atoll Marine National Monument (Rose Atoll MNM) through Presidential Proclamation 8337 (74 FR 1577; January 12, 2009). The Rose Atoll MNM boundaries extend 50 nm from Rose Atoll, similar to the LVPA in the southern portion of the EEZ around Tutuila, the Manua Islands, and Rose Atoll; however, the monument's boundaries were established independently and do not match the southern LVPA. The proclamation establishing the Rose Atoll MNM banned all commercial fishing.

The offshore area outside of the LVPA available for fishing by large vessels is approximately 87,299 square nautical miles (sq nm); however, the establishment of the Rose Atoll MNM in 2009 further reduced fishing area available to the large vessel longline and purse seine fleets by approximately 1,809 sq nm. In addition, the incongruent boundaries complicate compliance, administration, and enforcement efforts. For these reasons, the Western Pacific Fishery Management Council (Council) considered potential modifications to the boundaries of the southern LVPA for the purpose of encompassing the Rose Atoll MNM. The Council's preferred alternative recommends adjustment of the northern, eastern, and a portion of the southern boundaries of the LVPA around Tutuila, the Manua Islands, and Rose Atoll to align with the Rose Atoll MNM boundaries.

Document Overview and Preparers

This is a combined regulatory amendment and environmental assessment. The contents of this document comply with Magnuson-Stevens Fishery Conservation and Management Act

(Magnuson-Stevens Act) and National Environmental Policy Act (NEPA) requirements. The document informs interested and affected parties about the Council's recommended fishery management measures, and serves as the basis for a determination by the National Marine Fisheries Service (NMFS) on whether or not to prepare an environmental impact statement. The document also informs NMFS in its development of regulations that would implement the selected action, if approved by the Secretary of the Department of Commerce.

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Acronyms and Abbreviations

CPUE	Catch per unit of effort
Council	Western Pacific Fishery Management Council
EEZ	Exclusive Economic Zone
EFH	Essential Fish Habitat
ESA	Endangered Species Act
FAD	Fish aggregation device
FEP	Fishery Ecosystem Plan
FMP	Fishery Management Plan
FR	Federal Register
HAPC	Habitat Areas of Particular Concern
ITS	Incidental Take Statement
LVPA	Large vessel prohibited area(s)
MMPA	Marine Mammal Protection Act
mt	Metric ton(s)
nm	Nautical mile(s)
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
USCG	U.S. Coast Guard
VMS	Vessel monitoring system
WCPFC	Western and Central Pacific Fisheries Commission
WCPO	Western and central Pacific Ocean

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1 Introduction

The majority of the American Samoa longline fishery prior to 2002 was comprised of small scale, locally-built vessels, known as alia. These vessels are a fishing platform design originally introduced from neighboring Samoa for trolling and bottomfish fishing, but which were readily adaptable for longline fishing using a manual reel and monofilament longline gear. The small-scale longline fishery grew rapidly from a single operator in 1994 to 37 active vessels by 2000. The success of the fishery was based on the predominance of albacore, which formed between 70-80 percent of the catch, and the ability of longliners in Samoa and American Samoa to sell albacore to the two tuna canneries based in Pago Pago. Since 2009 only one cannery has been operating in Pago Pago; however, another company, Tri-Marine, is expected to start canning operations in 2012, bringing the number back to two.

In the late 1990s, three longline vessels longer than 50 ft began to operate in the fishery, prompting fishermen in the small-scale longline fleet to request that the Council implement some form of spatial zoning to minimize the potential for gear conflicts and catch competition. During this time, the alia fleet also developed, with larger 'super' alias longer than 40 ft entering the fishery. In addition, U.S. purse seiners occasionally fished in the EEZ around American Samoa, which supplied the two Pago Pago canneries.

The result was that the Council recommended a Pelagics FMP amendment to the Secretary of Commerce for NMFS to implement two spatial management zones in the U.S. EEZ around American Samoa (Figure 1). The northern and southern segments that comprise the LVPA were recommended by the Council in 1998 and implemented by NMFS in 2002 under the Council's Fishery Management Plan for Pelagic Fisheries of the Western Pacific Region (Pelagics FMP). [1] Regulations for the LVPA can be found at 50 CFR Part 665.806.

The zones prohibited fishing operations of vessels longer than 50 ft as a measure to ensure the continuity of the small-scale longline fleet, while providing fishing opportunities for larger longliners and purse seine vessels in the remainder of the U.S. EEZ. The LVPA was implemented to separate large vessels (longliners and purse seiners) from small vessels (longliners and trollers). Longline vessels longer than 50 ft that operated within the LVPA prior to November 1997 were allowed to continue fishing within the management zone; however, there were only two vessels that fall under this exemption. There was relatively low and sporadic effort and catch from purse seine vessels in EEZ waters around American Samoa from 1997-2010, with the annual total number of fishing days within the EEZ ranging from 6-37 days with an average 17 days. Total, annual tuna catch ranged widely from 0-228 mt, with an approximate annual average of 79 mt (NMFS Southwest Fisheries Science Center (SWFSC); see Table 3).

The area closures provided the desired effect of providing a separation of the large and small vessel fleets, thus reducing the potential for gear conflicts and catch competition. The Council was concerned that such conflicts and competition could lead to reduced opportunities for sustained participation by residents of American Samoa in the small-scale pelagic fishery. Prior

[1] In 2010, the FMP was renamed: Fishery Ecosystem Plan for Pacific Pelagic Fisheries of the Western Pacific Region (Pelagics FEP).

to 2002, when the LVPA was implemented, the majority of fishery participation was by small longline vessel operators who were concerned that the greater fishing power of larger longline vessels would directly compete with their ability to catch target species. The large fishing vessels operated in the 70 percent of the U.S. EEZ open to them, some ranging further into high seas areas to the north and south of American Samoa, and fishing through licensing agreements in neighboring countries, especially in the Cook Islands.

The alia fishery entered a period of declining participation after a high in 2001. This decline is attributed to the combination of economic costs such as fuel prices and falling catch rates of albacore in the waters around Tutuila and the lack of range by the alia fleet to seek fishing grounds further offshore where catch rates of albacore were more favorable (Levine & Allen 2009). The alia longline fleet has shrunk to one or two vessels operating from 2007 into 2011. The decline in albacore catch per unit of effort (CPUE) appears to be related to environmental conditions and possibly localized depletion. The American Samoa longline fleet is primarily a large vessel fleet, with about 25-30 vessels active in recent years, and lands about 9 million pounds of albacore annually.

A complication for the large longline and purse seine fleets has been the establishment of the Rose Atoll MNM in 2009 with boundaries extending for 50 nm, inside of which commercial fishing is prohibited. The Rose Atoll MNM boundaries were not drawn congruent with the LVPA for the southern islands in the archipelago. The mismatch of the two management areas may create compliance issues for fishermen, particularly those on large vessels, if confusion arises about areas open to fishing. Administration and enforcement efforts may also be affected as a result of the different management areas and potential violations.

The mismatches of the two zones on the eastern and southern edges of the LVPA around Tutuila, the Manua Islands, and Rose Atoll, increased the overall area closed to fishing by vessels 50 ft and longer by about 1,809 sq nm (about 1,097 sq nm to the south and 713 sq nm to the east). The American Samoa longline fleet has fished this area of water regularly, but only one purse seine set was made over a similar several year period (see Section 7.2). It is unlikely that an amendment to Presidential Proclamation 8337 would be issued to make the Rose Atoll MNM boundaries congruent with the LVPA in the southern portion of the EEZ around American Samoa. Therefore, this proposed action will facilitate fisheries management and enforcement, and minimize potential confusion by fishermen since all the managed areas will be enclosed within a single area.

1.1 Purpose and Need

The purpose of this regulatory amendment is to facilitate fisheries management and enforcement, and minimize potential confusion from fishermen by addressing misalignment between the boundaries of the existing southern large vessel prohibited area around Tutuila, the Manua Islands, and Rose Atoll in the EEZ around American Samoa and the more recently established Rose Atoll Marine National Monument (MNM). The MNM established by Presidential Proclamation 8337 in 2009 prohibits commercial fishing, and has boundaries that do not align with the southern LVPA. Besides reducing the overall area available to large vessels, this misalignment may complicate fishery administration and enforcement, and contribute to fishery

participant confusion about the spatial extent of the prohibited fishing areas. This action will address these concerns by adjusting the boundaries of the southern LVPA to encompass the Rose Atoll MNM.

1.2 Initial Actions

President Bush issued three separate Presidential proclamations in January 2009 that established several MNM in the western and central Pacific, including the Rose Atoll MNM. Under the proclamation establishing Rose Atoll MNM, the Secretaries of Commerce and Interior are required to prohibit all commercial fishing; although, the proclamation did allow for the possibility of noncommercial sustenance fishing, traditional indigenous fishing, and recreational fishing within the monument. However, regulations implementing the proclamation are not yet in effect; the Secretaries of Commerce and Interior are finalizing regulatory language for management of the area. The coordinates of the Rose Atoll MNM are not congruent with the boundaries of the southern LVPA, effectively increasing the area in which large vessels could not fish (Figure 1). This regulatory amendment assumes regulations will eventually be promulgated to implement the Monument's fishing restrictions.

The large vessel prohibited areas have been a topic for discussion for several years at Council meetings and at other public meetings with fishermen in American Samoa. Given the significant reduction of the small scale longline fleet, at the 148th meeting the Council recommended Council staff develop an options paper regarding the American Samoa longline fishery and LVPA. The paper explored spatial management options in the EEZ around American Samoa that might better reflect the current configuration of the pelagic fleet, including temporary options for modifying the LVPA.

The Council considered the various options at its 149th meeting, which included elimination of the LVPA, reductions from 50 nm to 12 and 25 nm, either temporarily or permanently, and modifications to the LVPA to eliminate the incongruence with the Rose Atoll MNM boundaries.

The Council recommended modification of the LVPA to eliminate any incongruent boundaries with the Rose Atoll MNM as its preliminary preferred alternative, so as to facilitate enforcement and fisheries operations by reducing fishery participant confusion as to what boundaries to follow and where. However, the Council did not favor a reduction of the LVPA to 12 or 25 miles around the southern islands because they wanted to maintain protection of the various banks and seamounts important to the American Samoa commercial and recreational troll fisheries. The Council did, however, preliminarily recommend that the northern LVPA around Swains Island be temporarily reduced to 25 nm.

At the 150th meeting, the Council took final action on this measure, but selected only alternatives to reduce the incongruence between the boundaries of the southern LVPA and the Rose Atoll MNM, and not to modify the prohibited area around Swains Island. Public testimony given at the 150th Council Meeting by representatives of Swains Island indicated that these islanders were not in favor of any changes to the current LVPA around Swains Island (WPRFMC 2011a). The Council did not identify any potential impacts of the proposed alternatives on the small vessel fleets, including trolling vessels. This document describes and analyzes the potential

environmental, social, and economic impacts of the proposed southern LVPA boundary modifications.

2 Description of Alternatives

Note: A detailed breakdown of the spatial zones described in the alternatives is given in Appendix 1.

Alternative 1. Under this alternative no modifications would be made to any of the implemented boundaries to prohibit large pelagic vessels from fishing within 50 nm of the islands of the American Samoa archipelago. The southern LVPA area of 22,722 sq nm, or 19.2 percent of the EEZ, would remain. This is the baseline against which all alternatives are compared. The southern and eastern portion of Rose Atoll MNM extending beyond the LVPA adds another 1,809 sq nm prohibiting commercial fishing by the Proclamation establishing the Rose Atoll MNM (see Figure 1). The total (LVPA and Rose Atoll MNM) southern area closed to large fishing vessels would be 24,531 sq nm and occupy 20.7 percent of the EEZ once regulatory language for management of the area is finalized and proclamation regulations are implemented.

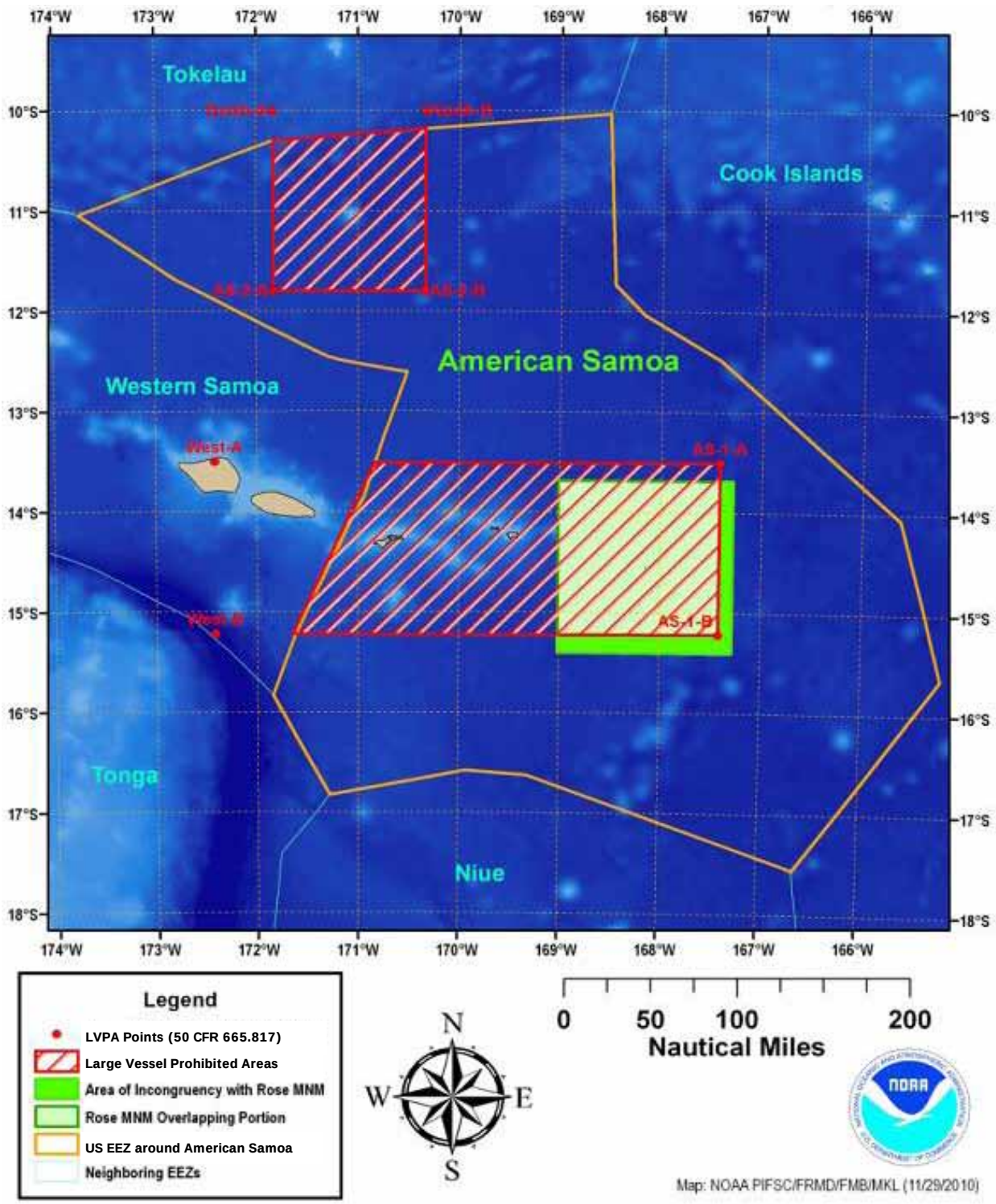

Figure 1: Large (≥50 ft) pelagic fishing vessel area closures in the American Samoa archipelago and the boundaries of the Rose Atoll Marine National Monument.
Source: NMFS Pacific Islands Fisheries Science Center (PIFSC) unpublished.

Alternative 2. Under this alternative the southern large vessel prohibited area boundaries would be adjusted by increasing the distance from shore in the east by 8 nm and south by 11 nm, so that the eastern and southern boundaries would encompass the Rose Atoll MNM. Under Alternative 2, the area of the southern LVPA would increase to 26,282 sq nm, an additional 3,560 sq nm, and occupy 22.2 percent of EEZ (see Figure 2).

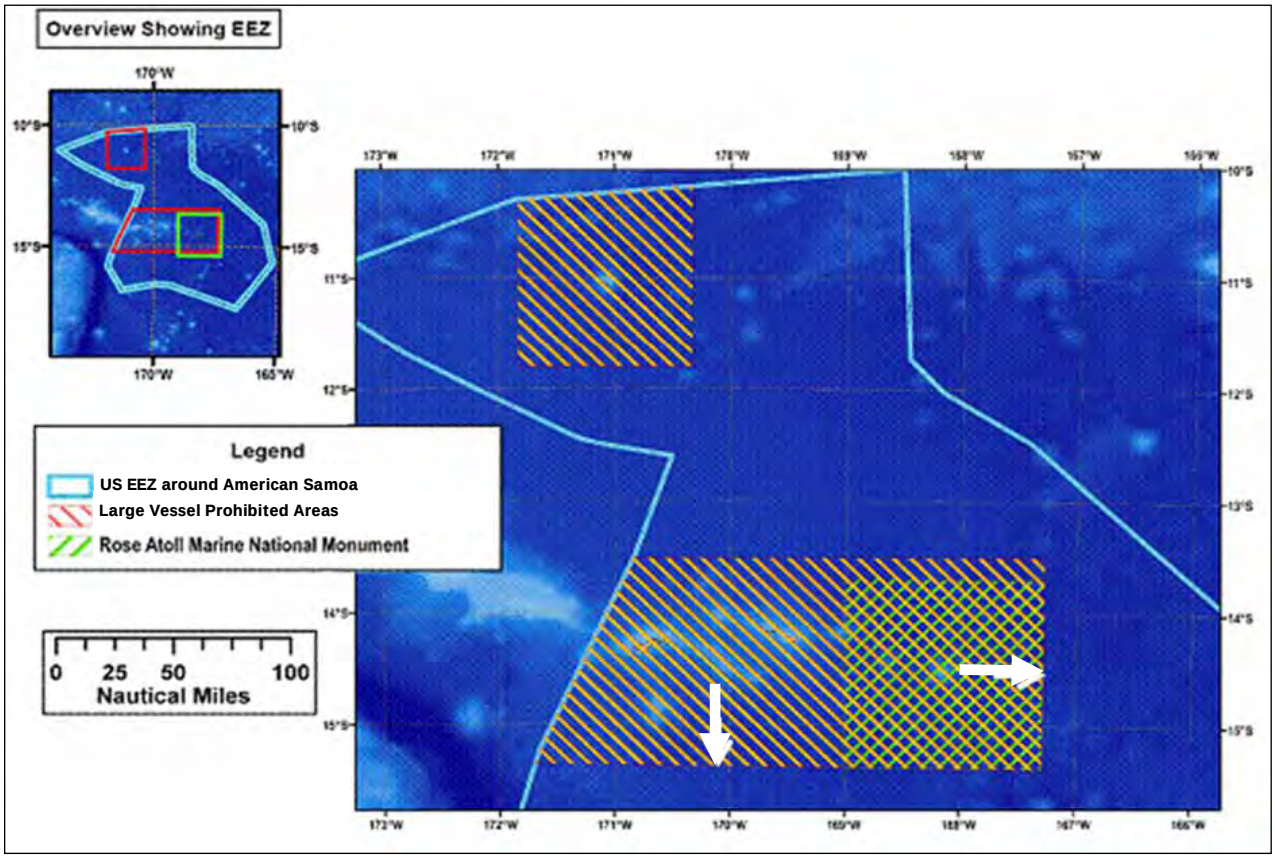

Figure 2: Alternative 2: Potential adjustments to the southern large vessel prohibited area's eastern and southern boundaries to encompass the Rose Atoll Marine National Monument.
Source: NMFS PIFSC unpublished.

Alternative 3. Under this alternative, the northern boundary of the southern LVPA would be reduced 11 nm south toward shore, and the eastern and southern boundaries would be extended 8 nm and 11 nm farther from shore to encompass the Rose Atoll MNM. Under Alternative 3, the area of the southern LVPA would increase to 24,061 sq nm, an additional 1,339 sq nm, and occupy 20.3 percent of the EEZ (see
Figure **3**).

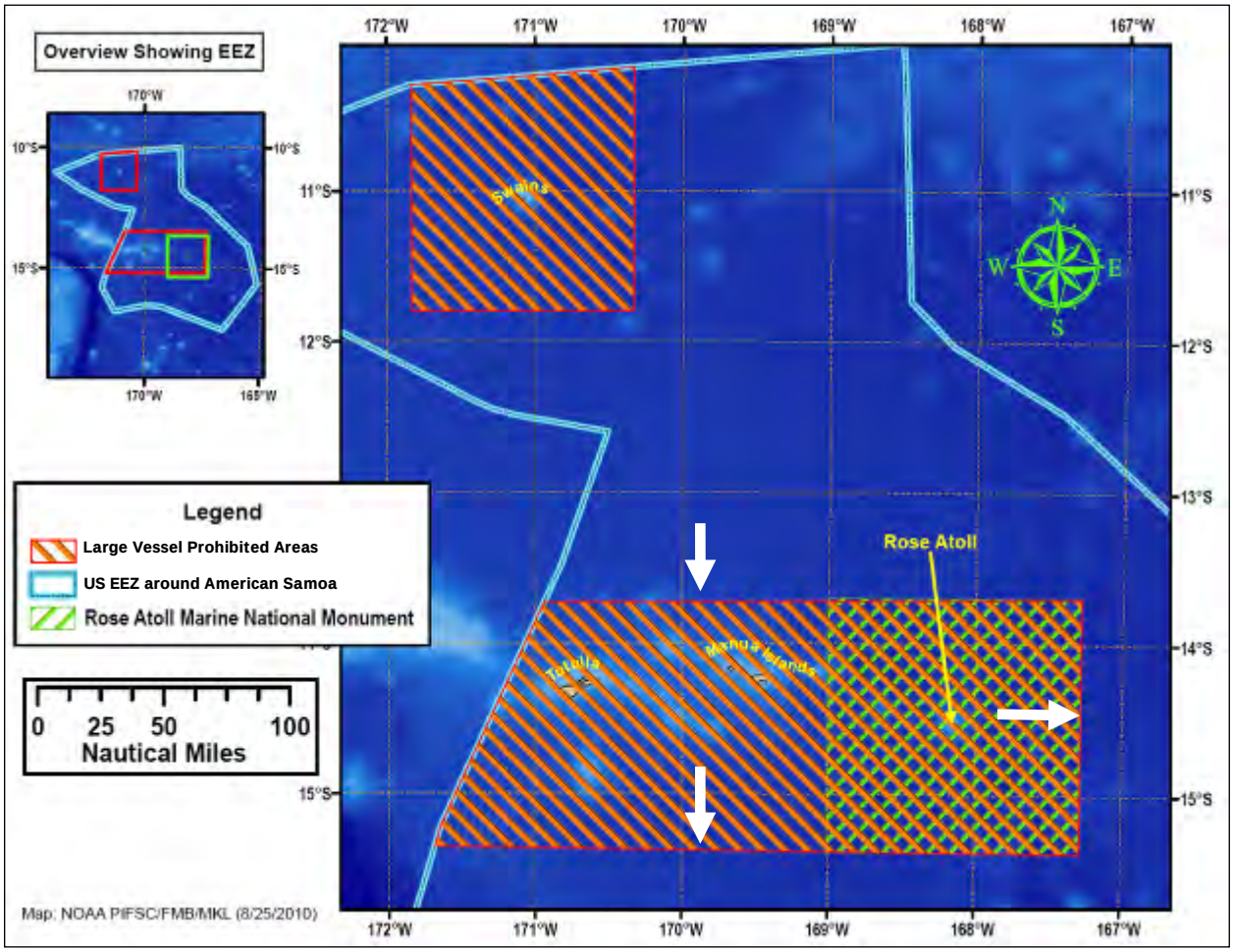

Figure 3: Alternative 3: Potential adjustments to the southern large vessel prohibited area's northern, eastern, and southern boundaries to encompass the Rose Atoll Marine National Monument.
Source: NMFS PIFSC unpublished.

Alternative 4. (Preferred) Under this alternative, the northern boundary would be reduced 11 nm toward shore, and the eastern boundary and a portion of the southern boundary would be extended 8 nm and 11 nm farther from shore to encompass the Rose Atoll MNM. Under Alternative 4, the area of the southern LVPA would decrease 326 sq nm to 22,396 sq nm, and occupy 18.9 percent of the EEZ (see
Figure **4**).

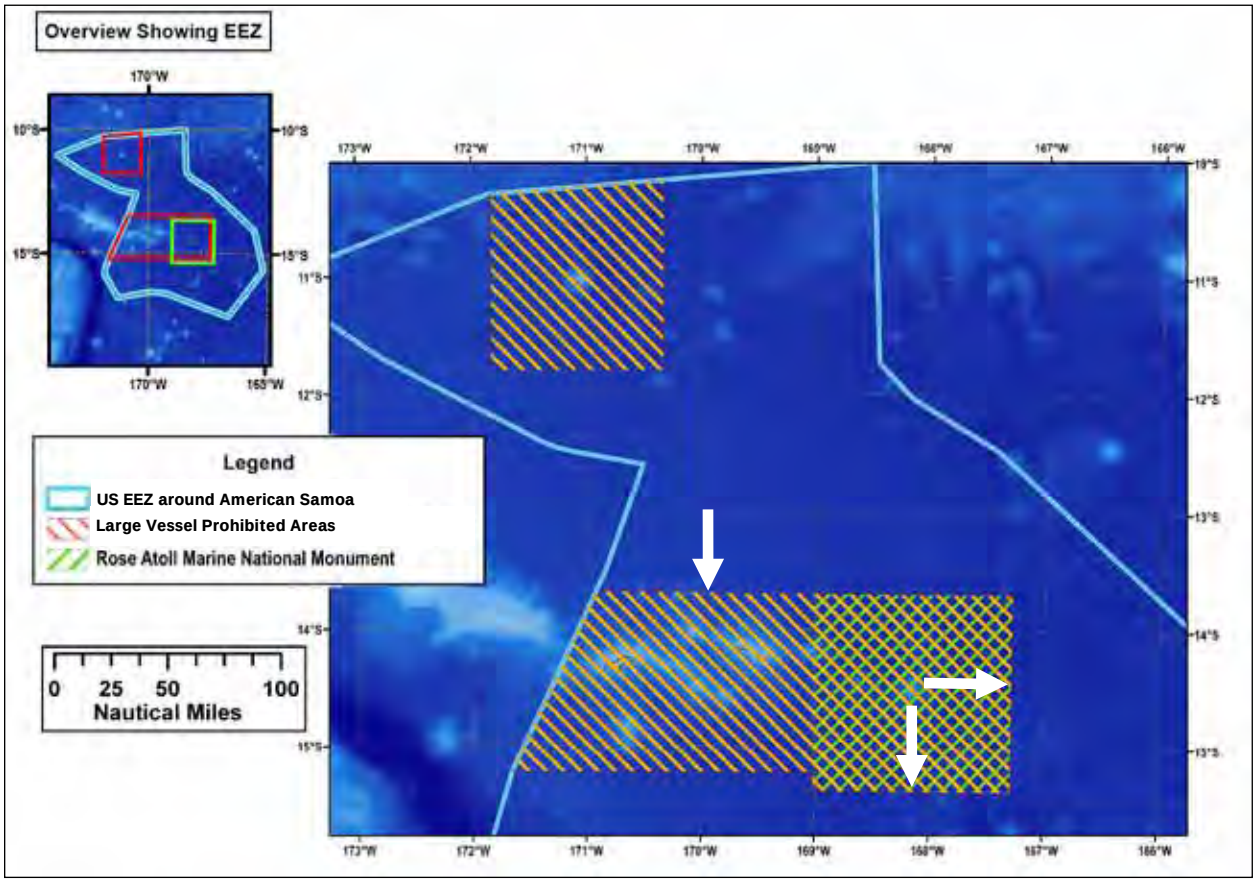

Figure 4: Alternative 4: Potential adjustments to the southern large vessel prohibited area's northern, eastern, and a portion of the southern boundaries to encompass the Rose Atoll Marine National Monument.
Source: NMFS PIFSC unpublished.

3 Description of the Affected Environment

American Samoa has been a U.S. territory since 1899. There is approximately 77 sq mi or 58 sq nm of land divided between five islands and two coral atolls (Rose and Swains Islands). U.S. EEZ waters around American Samoa comprise 118,272 sq nm and are truncated by other nearby island nations' EEZ. American Samoa is a fishing community under the Magnuson-Stevens Act, because American Samoa is substantially dependent on and engaged in the harvest and processing of fisheries resources in order to meet the social and economic needs of its citizens.

For a more detailed description of affected environment in American Samoa, in which the pelagic fisheries are managed under the place-based Fishery Ecosystem Plan (FEP), please refer to Section 8.1 of the Council's Pelagics FEP Amendment 5 titled "Measures to Reduce Interactions between the American Samoa Longline Fishery and Green Sea Turtles" (WPRFMC 2011b). To reduce redundancy, this information was not included in this document, but is hereby incorporated by reference. Copies of Amendment 5 are available from the Responsible Agency and Council listed on page 1 and will be available as a supporting document in the docket folder for this proposed action at www.regulations.gov.

The action area considered in this document consists of a subset of the EEZ waters around American Samoa. All of the alternatives considered relate to the boundaries of the southern LVPA around Tutuila, the Manua Islands, and Rose Atoll, and the Rose Atoll MNM.

3.1 American Samoa-based Pelagic Fisheries

A description of the American Samoa-based trolling, longline, and purse seine fisheries are given in Section 8 of Pelagic FEP Amendment 5 (WPRFMC 2011b) and disapproved Pelagics FEP Amendment 3 (WPRFMC 2011c) regarding purse seine fishing prohibited areas around American Samoa. Summaries are given of the fishing effort, catch, catch rate, species composition, and bycatch of the fisheries. Both sources also provide information on boat-based recreational fishing in American Samoa. Recreational and commercial trolling in American Samoa accounts for a small percentage of the overall catch of pelagic fish in the EEZ around American Samoa. To reduce redundancy, this information was not included here, but is hereby incorporated by reference.

3.2 Fishing in the Large Vessel Prohibited Areas

Longline Fishing

Table 1 and Table 2 provide a summary of the catches made within the current LVPA around the southern islands of American Samoa (Tutuila, the Manua Islands, and Rose Atoll). The time series is divided into the periods: 1) 1996-2002, before the LVPA was implemented in March 2002, and; 2) 2003-2009, when fishing in the LVPA was permitted only to vessels less than 50 ft, plus those large vessels having fished within the LVPA prior to November 13, 1997. The data have been merged because of data confidentiality issues relating to the number of small and large longline vessels fishing within the LVPA. The catch history in Table 1 and Table 2 thus reflects a mix of vessels, but with a progressively declining number of alia after 2001. The Rose Atoll MNM was established in 2009.

Table 1: Longline catch history from within the southern LVPA around the American Samoa Archipelago (Tutuila, Manua Islands, and Rose Atoll), 1996-2002.

Species	Catches in pounds						
	1996	1997	1998	1999	2000	2001	2002
ALBACORE	132,348	3,994	560,282	443,722	550,468	887,834	726,369
BIGEYE TUNA	5,596	519,904	9,821	21,869	19,481	17,439	19,775
BLACK MARLIN	1,358	11,344	0	11,820	11,480	1,599	0
BLACKTIP REEF SHARK	0	4,301	29,136	0	0	0	0

Species	Catches in pounds						
	1996	1997	1998	1999	2000	2001	2002
BLUE MARLIN	11,689	0	0	27,513	40,574	31,808	20,797
BLUE SHARK	898	25,306	0	674	252	336	168
BLUEFIN TUNA	0	897	17,801	0	0	476	27,033
GREAT BARRACUDA	0	0	0	0	0	52	73
MAHIMAHI	4,873	0	0	26,693	28,198	36,418	131
MAKO SHARK	449	20,941	0	1,685	0	181	4,467
MOONFISH	430	1,235	1,072	2,366	1,391	9,448	796
OCEANIC WHITE TIP SHARK	0	2,250	0	0	0	0	0
OILFISH	34	0	165	86	57	416	265
OTHER SHARK	786	148	2,358	60	0	181	48
OTHER PELAGIC	77	449	4,349	5,107	2,548	288	248
POMFRET	16	240	0	192	114	71	878
SAILFISH	1,326	32	1,675	185	1,489	1,560	29,335
SILKY SHARK	0	4,454	0	0	0	0	0
SKIPJACK TUNA	58	0	20,713	24,939	14,888	33,828	2,459
SPEARFISH	230	3,452	901	138	230	92	1,743
STRIPED MARLIN	1,020	871	0	0	2,890	1,995	138
SUNFISH	450	488	0	0	0	0	0
SWORDFISH	0	0	3,402	276	1,782	8,908	7,890
THRESHER SHARK	112	2,000	0	0	0	194	194
WAHOO	2,924	337	25,616	29,075	25,265	34,058	48,153
YELLOWFIN TUNA	14,781	12,096	51,408	117,472	164,397	137,874	217,901
Total	179,456	614,737	728,698	713,870	865,503	1,205,057	1,108,860

Table 2: Longline catch history from within the southern LVPA around the American Samoa Archipelago (Tutuila, Manua Islands, and Rose Atoll), 2003-2009.

Species	Catches in pounds						
	2003	2004	2005	2006	2007	2008	2009
ALBACORE	414,432	162,822	104,451	80,597	192,915	141,898	98,453
BIGEYE TUNA	13,348	6,572	4,708	2,623	8,231	3,271	3,662
BLACK MARLIN	8,020	0	92	0	0	2,583	816
BLACKTIP REEF SHARK	0	0	0	0	0	0	0
BLUE MARLIN	420	2,990	1,144	2,583	3,942	0	0
BLUE SHARK	1,190	0	0	0	168	0	0
BLUEFIN TUNA	20,658	238	0	0	0	0	0
GREAT BARRACUDA	0	0	0	0	198	0	10
MAHIMAHI	601	5,329	7,920	3,835	6,254	1,872	2,292
MAKO SHARK	1,037	90	0	0	0	0	0
MOONFISH	296	691	2,292	104	494	642	445

Species	Catches in pounds						
	2003	2004	2005	2006	2007	2008	2009
OCEANIC WHITE TIP SHARK	0	0	0	0	271	0	0
OILFISH	246	0	0	38	19	0	0
OTHER SHARK	0	19	374	0	48	0	0
OTHER PELAGIC	96	48	90	0	0	0	0
POMFRET	0	53	0	0	0	0	5
SAILFISH	567	425	25	366	1,135	355	1,276
SILKY SHARK	15,697	71	0	0	14,049	0	0
SKIPJACK TUNA	0	8,296	2,320	2,755	0	9,504	4,888
SPEARFISH	0	46	46	92	0		1,012
STRIPED MARLIN	413	1,307	1,307	482	826	69	1,995
SUNFISH	0	0	0	0	0	0	0
SWORDFISH	2,545	1,446	1,782	542	764	72	255
THRESHER SHARK	0	0	0	0	0	0	0
WAHOO	24,763	19,378	15,297	7,651	16,970	7,669	6,384
YELLOWFIN TUNA	80,475	87,044	60,000	55,195	80,250	56,550	33,727
Total	584,805	296,867	201,847	156,862	326,532	224,483	155,221

Source: NMFS PIFSC Western Pacific Fisheries Information Network (WPacFIN).

Catches of albacore show the same general increase in catch in the entire longline fishery up to 2001, with a peak of about 887,000 lb and a total catch of 1.2 million lb. From 2002 onwards, there was a steady decline in the catch within the LVPA due to the exclusion of large pelagic vessels from this area that had no documented fishing prior to November 13, 1997. The decline in catch also reflects the shrinking participation by the small vessel longline alia fleet operating in the territory, especially around Tutuila (Levine and Allen 2009). Catches have varied in the post-LVPA implementation period and have averaged 170,795 lb (albacore) and 278,088 lb (total catch) between 2003 and 2009. This area of water has been fished regularly by the American Samoa longline fleet between 2000 and 2008, producing a total 1.9 million pounds of fish, or 237,000 lb annually worth about $237,000 per year (Lowe and Graham 2009).

Purse Seine Fishing

Purse seine fishing has occurred sporadically in the U.S. EEZ around American Samoa and this fishing activity is summarized in WPRFMC 2011c from which Table 3 is adapted and updated. During the period 1998-2007, one purse seine set occurred in the area occupied by the southern portion of the Rose Atoll MNM. Based on the average catch per set using data in Table 3, and assuming the number of trip days equals the number of sets, the catch may have been between 4-5 mt. The precise amount of fish and exact locations of sets within the LVPA or the EEZ are unknown and were not given for the data in Table 3.

Table 3: Reported U.S. Purse Seine Catches from American Samoa, 1997-2010.

YEAR	Trip days (n)	Vessels (n)	SKJ catch (mt)	YFT catch (mt)	BET catch (mt)
1997	6	6	0	0	0
1998	22.5	11	36.00	0	0
1999	24	10	43.90	20.80	0
2000	19	10	32.95	16.60	0
2001	33	15	152.19	9.93	7.30
2002	37.33	20	100.86	12.60	0
2003	15	8	0	0	0
2004	9	8	5.40	10	0
2005	7	4	59.00	5.40	0
2006	6	5	2.70	6.30	0
2007	6	3	0	0	0
2008	12	7	150.00	12.00	19.00
2009	33.5	12	188.00	30.00	10.00
2010	8.66	4	180.00	0	0
MEAN	17.07	8.79	67.93	8.83	2.59

Source: NMFS SWFSC.
Note: SKJ, skipjack tuna; YFT, yellowfin tuna; BET, bigeye tuna. 2010 data are preliminary.

3.3 Status of Target, Non-Target, and Bycatch Fish Stocks

Several pelagic species are caught by trolling in the EEZ around American Samoa, primarily comprised of skipjack and yellowfin tunas, and secondarily other pelagic species. However, landings are a small component of overall exploitation around American Samoa and are not anticipated to significantly contribute to any potential stock status challenges. Total estimated landings by trollers in 2009 and 2010 were 5,752 and 3,844 pounds, respectively (WPacFIN). [2]

The principal target stock for the American Samoa longline fishery is South Pacific albacore, which from 2002 and 2009 annually ranged from 61 to 84 percent of the longline catch (mean 77%). Skipjack tuna comprised from approximately 30 to 100 percent of the purse seine total catch from 1997-2010 in the U.S. EEZ around American Samoa, with yellowfin tuna comprising the majority of the remaining retained catch (Table 3).

Bigeye tuna is currently experiencing overfishing; however, international measures have been implemented to manage this stock throughout its range and reduce impacts. [3] None of the other stocks in caught by the American Samoa-based pelagic fisheries are overfished, nor is overfishing occurring.

[2] http://www.pifsc.noaa.gov/wpacfin/as/Pages/as_data_5.php accessed on November 11, 2011.
[3] To address the overfishing of bigeye in the Western and Central Pacific Ocean, the WCPFC agreed in 2008 on: "Conservation and Management Measure for Bigeye and Yellowfin Tuna in the Western and Central Pacific Ocean" (CMM 2008-01) with the overall objective to reduce fishing mortality on bigeye tuna by 30 percent in the WCPO in the three-year period from 2009-2011.

The American Samoa-based pelagic fisheries target and catch a variety of highly migratory stocks. A description of the stock statuses and a brief account of international tuna management arrangements in the western and central Pacific Ocean are provided in Section 8.5 of Pelagics FEP Amendment 5 (WPRFMC 2011b) and Section 8.5 of disapproved Pelagics Amendment 3 (WPRFMC 2011c). Updated stock assessments in 2011 for bigeye, skipjack, South Pacific albacore, and yellowfin tunas have not changed any of the conclusions of the most recent assessments described in WPRFMC 2011b or WPRFMC 2011c. The most recent stock assessments were evaluated to ensure responsible fisheries management regardless of the proposed action.

Under any of the alternatives the pelagic fisheries would continue to catch highly migratory species, such as tunas and marlins, in the manner that is described above, with recent effort and catches expected to continue. Management through fisheries monitoring programs administered by American Samoa's Department of Marine and Wildlife Resources and Pacific Islands Fisheries Science Center (PIFSC) would continue to advise the Council and NMFS of any necessary modifications.

3.4 Protected Species

A number of protected species have been documented or believed to occur in the EEZ around American Samoa. The American Samoa-based pelagic fisheries have been evaluated for impacts on protected species and are managed in compliance with the requirements of the Magnuson-Stevens Act, the Marine Mammal Protection Act (MMPA), the Endangered Species Act (ESA), and other applicable statutes.

A description of protected species in the American Samoa archipelago is given in Section 8.6 of Pelagics FEP Amendment 5 (WPRFMC 2011b). This section provides a synopsis of information on species protected by the ESA such as sea turtles, certain marine mammals, and seabirds and is hereby incorporated by reference. This section also includes information on non-endangered marine mammals protected under the Marine Mammal Protection Act and a list of seabirds not listed under the ESA that are resident or migrate through American Samoa.

4 Impact Analysis of the Alternatives

The large vessel prohibited areas currently prohibit all vessels 50 ft and longer from fishing for pelagic fish, such as tunas and billfish, which includes most longliners and all purse seiners. The areas extend from shore to about 50 nm from the American Samoa islands. The impacts of these alternatives are analyzed collectively, since all action alternatives contain potential boundary modifications of the approximately 50 nm southern LVPA around Tutuila, the Manua Islands, and Rose Atoll. The Council selected the preferred alternative that would achieve congruency with the Rose Atoll MNM with the minimum impacts to fishermen. In this respect, Alternative 3 creates the most easy to understand and the most aligned boundary scheme, from a fishery operations and enforcement standpoint. However, the Council selected Alternative 4 as more reasonable, since it results in a most similar fishable area to the southern LVPA even if it has more complex boundaries.

The data used to assist with the analyses and with the geometry of each of the various alternatives was provided by Lowe and Graham (2010), and is summarized in Appendix 1 of this regulatory amendment.

The no action alternative would maintain the current prohibited areas to large pelagic fishing vessels 50 ft and longer. The southern LVPA would remain at 22,722 sq nm or 19.2 percent of the EEZ. This is the baseline against which all alternatives are compared. Once regulatory language for management of the area is finalized and proclamation regulations are implemented, the southern and eastern portion of Rose Atoll MNM extending beyond the LVPA would add another 1,809 sq nm for a total area closed to large fishing vessels of 24,531 sq nm, an 8 percent increase of the southern LVPA, and occupy 20.7 percent of the EEZ.

4.1 Impacts on Target and Non-target Stocks

The LVPA provides protection against catch competition and gear conflicts to small pelagic fishing vessels, including one or two small longline vessels operating from Pago Pago. Fishing success of the small longline vessel fishing around Tutuila will be a function of albacore and other pelagic fish species abundance and availability in the nearshore waters around this island where the majority of its effort is concentrated. Further, the commercial and recreational troll fisheries and their fishing grounds on seamounts around Tutuila and the Manua Islands within the LVPA will continue to be protected from potentially competitive interactions with the longline fishery that incidentally catches skipjack, yellowfin, mahimahi, and wahoo; all targets of the troll fishery.

For the last several years, the longline fishery has been relatively stable in terms of catches of both target albacore and the other non-target species, principally other tunas such as skipjack, yellowfin, and bigeye, as well as mahimahi, wahoo, billfish, and sharks. It is unlikely that the proposed minor changes to the geometry of the southern LVPA would have any substantial impacts on the South Pacific albacore stock, or any other non-target pelagic stocks, which extend across the entire South Pacific or the western and central portion of the South Pacific. It is not expected that changes in the southern LVPA under any of the action alternatives would lead to substantial changes in fishing effort and catch. The preferred alternative would result in a minimal increase in the available fishing area to the longline and purse seine fleets (326 sq nm) in comparison to the southern LVPA.

Fishing by the large vessel longline fleet in the remainder of the U.S. EEZ will likely continue to be comparable to other years, with vessels fishing around the LVPA or fishing outside of the U.S. EEZ through access agreements with neighboring countries or in the high seas to the north, east, and south of American Samoa.

The purse seine fishery would not be greatly affected by the no-action and action alternatives, since it fishes only occasionally in the U.S. EEZ (WPRFMC 2011c) and none of the alternatives are expected to result in substantial changes in fishing area, methods, and effort. Over the period summarized in Table 3 where catches are reported (1997-2010), between 13 and 39 U.S. purse seine vessels operated in the western and central Pacific catching a total of 1,739,834 mt or

133,833 mt annually. The total volume of fish caught in the EEZ around American Samoa from 1997 and 2010 represents about 0.05 percent of the total U.S. purse seine catch.

4.2 Impacts on Protected Species

On October 1, 2001, the NMFS Pacific Islands Regional Office's (PIRO) Protected Resources Division concluded informal section 7 consultation under the Endangered Species Act (ESA), and concurred with the Sustainable Fisheries Division's determination that the regulatory amendment establishing the LVPA was not likely to adversely affect species listed under the ESA or their critical habitat. The Protected Resources Division added that there was no information to indicate the establishment of the LVPA would change potential impacts to ESA-listed species or critical habitat described in a biological opinion (BiOp) issued on March 30, 2001 on the authorization of the Pelagic Fisheries Management Plan in the Western Pacific.

The proposed action is not likely to change longline or purse seine fishing operations or effort levels in a manner that causes an effect to listed species that was not considered in prior consultations. Alternatives 2 and 3 would change the southern segment of the LVPA and add 3,560 sq nm and 1,339 sq nm to the southern LVPA, respectively, while Alternative 4 would result in 326 sq nm less of large vessel prohibited fishing area. No protected species interaction spatial patterns or hot-spots have been indentified around the current LVPA or throughout the EEZ. Therefore, any alternatives included in this document modifying the area or shape of the southern LVPA would likely not significantly affect interaction rates. Alternatives 2 and 3 may provide a minimal amount of additional protection to protected species since large vessels would not be allowed to fish in these areas; however, vessels would still transit through these areas to reach their fishing grounds and any effort reduced in an area would likely be displaced to other available fishing areas. Although the preferred alternative would allow fishing in a relatively small amount of area previously prohibited, no additional effort is expected to result; therefore, interaction rates are anticipated to remain similar to recent years. Under any of the alternatives, if there were a significant increase in protected species interactions in the EEZ around American Samoa or any of the ESA BiOp consultation triggers were met, the Council and NMFS would take appropriate steps to ensure adequate levels of protection to marine resources.

Sea Turtles
In 2010, NMFS issued a BiOp on the impacts of the American Samoa longline fishery to sea turtles, resulting from the Council's Pelagics FEP Amendment 5 requiring all large longline vessels to set their hooks at depths of at least 100 m. The 2010 BiOp (NMFS 2010) gives a summary of the consultation history between the NMFS Pacific Islands Regional Office's Sustainable Fisheries and Protected Resources Divisions. The BiOp considers the impact of the Council's proposed 100 m minimum hook depth requirement on four species of marine turtles, namely, greens, hawksbills, olive ridleys and leatherbacks. Loggerhead sea turtles are protected under the ESA and may be found in the waters around American Samoa, though they were deemed not likely to be adversely affected by the proposed 100 m or greater fishing depth, partially because of their scarcity in the action area. NMFS determined that Amendment 5 is not likely to jeopardize the continued existence of any endangered or threatened species under the jurisdiction of NMFS or result in the destruction or adverse modification of critical habitat. The current LVPA was included in the action area for the 2010 BiOp.

The spatial distribution of sea turtles interactions with the longline fishery does not show any strong spatial structure other than most interactions have occurred where fishing effort is highest, in the central part of the EEZ to the north of the southern LVPA.

Information on sea turtle interactions with foreign and domestic purse seine vessels in the Western and Central Pacific Ocean (WCPO) is scarce; however, domestic vessels are operated in accordance with domestic and international management regimes when implemented domestically, and include consultations under section 7 of the ESA. In November 2006, NMFS issued its Biological Opinion on the effects of the U.S. purse seine fishery in the WCPO on ESA-listed sea turtles and whales. The 2006 BiOp concluded the domestic purse seine fishery would not jeopardize the survival and recovery of listed species, nor adversely modified critical habitat. Potential adverse effects of the purse seine fishery on listed species were analyzed, including vessel traffic, gear deployment and retrieval, entanglement in fish aggregating devices (FADs), and removal of fish biomass from the pelagic ecosystem (NMFS 2006). The purse seine effort considered in the Biological Opinion was based on the general trend of purse seine fishing effort being concentrated north and northwest of American Samoa, although American Samoa and the LVPA were included within the action area. NMFS determined that purse seine fishing activities are not likely to jeopardize the continued existence of any endangered or threatened species under the jurisdiction of NMFS or result in the destruction or adverse modification of critical habitat. None of the alternatives are expected to change purse seine fishing practices in a substantial manner, and therefore, it is expected that any potential effects on sea turtles would not change the analyses and determinations made in the 2006 BiOp.

Potential changes to the size of the southern LVPA, whether an increase or decrease in size, are relatively small and not likely to have a large effect on increasing or decreasing fishing effort. Any displaced effort would likely transfer to remaining accessible areas. Therefore, none of the alternatives, including the preferred, are expected to result in substantial changes in the conduct of American Samoa large vessel fisheries, that is, area fished, effort and catch, and interaction rates with sea turtles.

Seabirds

Species listed under the ESA that may occur in the action area include the threatened Newell's shearwater (*Puffinus auricularis newelli*), Chatham petrel (*Pterodroma axillaris*), Fiji petrel (*Pseudobulweria macgillivrayi*), and magenta petrel (*Pterodroma magentae*). From observed longline trips from 2006 through June 2011, observers reported one seabird interaction (unidentified shearwater in 2007). [4] Few interaction are expected as typically longline-seabird interactions are minimal in tropical latitudes, being more or less restricted to higher sub-tropical and temperate latitudes (Molony 2005). It is difficult to accurately extrapolate interaction rates across the fleet with about five half years of data, the majority of which reported zero seabird interactions; however, it is likely the American Samoa longline fishery has little impact on seabirds.

Molony (2005) estimates that on average there may be two interactions per year between seabirds and all foreign and domestic purse seiners operating in the Western and Central Pacific

[4] Found on NMFS PIRO website at: http://www.fpir.noaa.gov/OBS/obs_qrtrly_annual_rprts.html

Ocean with no mortality. As noted above, none of the alternatives are expected to change U.S. purse seine fishing practices, and therefore, it is expected that the alternatives are not likely to change previous effects determinations (no jeopardy or adverse modification) for purse seine fishing and interactions with seabirds found in the EEZ around American Samoa.

The Newell's shearwater is listed as threatened under the ESA, because of its small population of approximately 14,600 breeding pairs, isolated breeding colonies, and numerous land-based hazards affecting breeding colonies. The Newell's shearwater breeds only in colonies on the main Hawaiian Islands, and is threatened by urban development, and introduced predators, such as rats, cats, dogs, and mongooses (Ainley et al. 1997).

There is one documented case of a single Newell's shearwater in American Samoa. In January 1993, a female Newell's shearwater was found alive, but injured, on Tutuila. The bird may have been sick, because it weighed only 291 g, well below the range of 353-439 g (n = 11) given by King and Gould (1967). Only one other record exists of this species in the Southern Hemisphere near Baker Island (King and Gould 1967). Since the sighting, biologists in American Samoa have not documented any other Newell's shearwater (J. Seamon, American Samoa Department of Marine and Wildlife Resources, pers. comm., Nov. 2009). In addition, observers or fishermen around American Samoa have made no at-sea observations. Therefore, the Newell’s shearwater should be considered an accidental visitor to American Samoa. This is consistent with distribution estimates in Waugh et al. (2009).

Given the low level observed interactions with seabirds and the minimal degrees of potential change to the southern LVPA, none of the alternatives considered here, including the preferred alternative, are likely to have any substantial change in seabird interaction rates with the American Samoa large vessel fisheries. During an informal consultation with the USFWS for Amendment 5 to the Pelagics FEP (WPRFMC 2011b) the USFWS concurred with NMFS that the American Samoa longline fishery is not likely to adversely affect the Newell’s shearwater. In a separate communication on July 29, 2011, and recorded in a memorandum for the record, 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 probably not affect those petrels nor result in the destruction or adverse modification of any designated critical habitat in the western Pacific since critical habitat has not been designated for these species. The proposed action is not likely to change longline or purse seine fishing operations or effort levels in a manner that causes an effect to listed species that was not considered in prior consultations.

Marine Mammals

Fishery interactions between the longline fleet and small cetaceans have been observed on an infrequent basis since regular observer coverage started in 2006; three out of the five years reported zero marine mammal interactions. No large whale interactions have been observed in the American Samoa longline fishery. None of the alternatives are anticipated to significantly alter fishing effort, location, or conduct. Therefore, no significant changes in marine mammal interaction rates are expected in the longline fishery.

Domestic purse seine vessels in the WCPO are operated in accordance with domestic and international management regimes, when implemented domestically, and include the ESA and MMPA. In November 2006, NMFS issued its Biological Opinion (2006 BiOp) on the effects of the U.S. purse seine fishery in the WCPO on ESA-listed sea turtles and whales. The 2006 BiOp concluded the domestic purse seine fishery would not jeopardize the survival and recovery of listed species, nor adversely modified critical habitat. Potential adverse effects of the fishery on listed species were analyzed, including vessel traffic, gear deployment and retrieval, entanglement in FADs, and removal of fish biomass from the pelagic ecosystem (NMFS 2006). The purse seine effort that was considered in the Biological Opinion was based on the general trend of purse seine fishing effort being concentrated north and northwest of American Samoa, although American Samoa and the LVPA were included within the action area.

None of the alternatives, including the preferred alternative, are expected to alter current impacts to marine mammals. As noted above, the spatial distribution of protected species interactions do not show any strong spatial structure. Therefore, the action alternatives, including the proposed action are not expected to result in substantial changes in the conduct of American Samoa large vessel fisheries, that is, area fished, or effort and catch, and interactions with the American Samoa large vessel fisheries. None of the alternatives are anticipated to affect marine mammals in any manner not previously considered or authorized by the commercial fishing incidental take authorization under section 118 of the MMPA. In addition, it is expected that any potential effects on marine mammals would not change the analyses and determinations made under the 2006 BiOp.

4.3 Impacts on Marine Habitat

None of the alternatives are expected to result in any increased gear loss over existing conditions or any additional impacts to marine habitats, including essential fish habitat (EFH), habitat of particular concern (HAPC), marine protected areas, marine sanctuaries, or marine monuments. Longline fishing occurs in pelagic waters within the upper portion of the water column and is not known to have any documented impacts on habitat during fishing operations. Gear loss, however, does occur in longline fisheries and has the potential to impact reef or other habitats. Fishermen try to recover all gear, and are normally successful as the floats used in the fishery are marked to be visible from distance, even at night.

Purse seining generally has little direct effect on the habitat (AG 2009). Purse seine fishing using FADs may result in loss of FADs, or FAD material, which could end up as marine debris. Marine debris has the potential to negatively impact reef and other coastal marine habitat. None of the alternatives are expected to change current FAD use and gear loss frequencies.

4.4 Impacts on Fishery Participants and Fishing Communities

The no-action alternative would not align the southern LVPA boundaries with the Rose Atoll MNM. This may confuse fishermen, who are likely more familiar with the LVPA boundaries than with the Rose Atoll MNM, since the monument proclamation is more recent. Potential violations of the no fishing areas may occur as a result of a misunderstanding of permitted fishing areas for large vessels.

Under the action alternatives, including the preferred alternative, the Rose Atoll MNM will be encompassed by the LVPA boundaries around Tutuila, the Manua Islands, and Rose Atoll. This should reduce any potential confusion about where large vessels can fish once fishermen are notified of any changes. By wholly including the Rose Atoll MNM within the southern LVPA, any potential regulatory confusion to fishermen should be minimized. The two marine areas were established for different management purposes, yet both have some fishing restrictions. The area encompassed by the southern LVPA under the preferred alternative includes banks and seamounts used by commercial and recreational trollers so that these fishing opportunities would continue to be available to these sectors without potential competition from the large longline and purse seine fisheries.

None of the alternatives, including the preferred alternative, making modest adjustments to the southern LVPA boundaries, are likely to have a major influence on the length of travel time for large vessel longliners and purse seiners in American Samoa before they are able to start fishing. Most, if not all of the large longline and purse vessels are based out of Tutuila, and because the southern LVPA's northern boundary would be moved slightly closer to shore, large vessel participants could see a minor benefit if they travel north. Overall, travel time to fishable water will be similar to the status quo.

If the Secretary of Commerce approves the recommended changes to the LVPA boundaries, regulations will need to be promulgated and a revised regulatory compliance guide will need to be produced. Participants in the American Samoa-based large vessel fisheries will need to be contacted and made aware of any changes to the southern LVPA.

In 2009, Council Advisory Panel members were concerned that the Rose Atoll MNM is misaligned with the Council-recommended LVPA for large vessels, which may be an enforcement issue for the U.S. Coast Guard (USCG) and problematic for the fishermen. They stated that the Monument should use the same boundaries for ease of enforcement (WPRFMC 2009a). For a period of about a year and a half since the creation of the Rose Atoll MNM, the NOAA Office of Law Enforcement has documented six instances where large vessels have been operating outside the LVPA but within the boundaries of the MNM, and, thus, warned that they may be committing a potential violation (Bill Pickering, NOAA Office of Law Enforcement, pers. comm., Sept. 2011).

4.5 Impacts on Biodiversity and Ecosystem Function

There are no known large or adverse impacts on biodiversity and the pelagic ecosystem function occurring as a result of the large vessel longline and purse seine fisheries in the EEZ around American Samoa. Neither the no-action nor action alternatives are anticipated to change this. Longline and purse seine fishing removes top predators, such as tunas, which likely has some ecosystem impacts; however, there is no indication of negative impacts from these fisheries around American Samoa.

4.6 Impacts on Enforcement and Administration

Large longline and purse seine vessels are required to carry VMS beacons through which their activities are monitored by the USCG and the NOAA Office of Law Enforcement. The no-action alternative may result in increased enforcement or administrative efforts to process potential violations of no fishing areas, as well as continue to inform fishermen about the different no fishing areas. This may confuse fishermen, who are likely more familiar with the LVPA boundaries than with the Rose Atoll MNM, since the monument proclamation is more recent. Potential violations of the no fishing areas may occur as a result of a misunderstanding of permitted fishing areas for large vessels that could increase enforcement burden. None of the action alternatives, including the preferred alternative, is thus expected to significantly increase enforcement and administration costs; indeed this may actually reduce burden and costs by aligning the boundaries.

The no action alternative would result in no additional administrative burden; the additional area of the Rose Atoll MNM extending beyond the southern LVPA prohibiting commercial fishing, including by large vessels, would remain. Administrative confusion may result as a byproduct of having similar, but unequal areas prohibiting commercial fishing to at least some degree in the EEZ around American Samoa. Encompassing the two spatially managed areas together under one of the action alternatives should minimize any administrative confusion about areas closed to fishing by large vessels around American Samoa with minimal administrative burden.

4.7 Impacts on Public Health and Safety

The potential changes in the southern LVPA to achieve congruency with the Rose Atoll MNM are modest compared to the area currently accessible by the American Samoa-based large vessel fleets, and under the no action alternative. The action alternatives, including the proposed action are not expected to result in substantial changes in the conduct of American Samoa large vessel fisheries, that is, area fished, or effort and catch. The American Samoa large vessel fisheries would continue to operate largely unchanged with no known public health or safety issues. Under every alternative, all fishing vessels would continue to be required to adhere to all applicable regulations, which include considerations for safety-at-sea, and therefore, no impacts to public health or safety are expected to occur.

4.8 Other Impacts

4.8.1 Future Federal Actions

Other related Council actions expected to occur in the foreseeable future in fisheries occurring in waters around American Samoa include amendments to the Pacific Pelagics FEP including those to: manage American Samoa longline vessels within the bigeye tuna catch limits for Pacific Islands Territories; modify the American Samoa limited entry longline permit system; and an amendment to prohibit the use of FAD sets by purse seiners in U.S. EEZ waters of the western Pacific. There are alternatives under consideration to combine vessel class sizes in the American Samoa longline fishery; however, none of the proposed actions in and of themselves would enable the longline fishery in American Samoa to expand beyond the maximum number of

permits (60) delineated in the limited entry program. These actions may result in impacts to the human environment or to communities, which will be analyzed in the respective amendment documents.

In addition, there is a proposal to enlarge sanctuary waters around American Samoa through expansion of Fagatele Bay National Marine Sanctuary. These areas may add further protection to marine resources through restricting human activities. Based on proposals of sanctuary modifications, any expansion should not impact the proposed action because the sanctuary boundaries would likely be close to shore.

4.8.2 Climate Change Impacts

In its 2007 report, the Intergovernmental Panel on Climate Change (IPCC) stated that: "Warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global average sea level" (IPCC 2007). Climate change and potential sea level rise may affect sea turtles and other listed species, human communities, target or non-target stocks, marine ecosystems, essential fish habitat (EFH), and other habitats found in and around American Samoa.

A more complete summary of climate change and climate change impacts can be found online at http://www.ipcc.ch/publications_and_data/publications_and_data_reports.shtml#1 (IPCC 2007).

Sea level rise resulting from melting polar ice and thermal ocean expansion have the potential to result in the physical loss of coastal habitats and degradation of, or changes to, coastal or nearshore marine habitats that can adversely affect fisheries and wildlife and cause damage to coastal infrastructure. In some cases, the effects of global climate change, or even smaller scale climate patterns, may be detectable on short and long-term time scales and/or at local levels. In other cases, data may be lacking with which to determine local impacts. For these reasons, it is often difficult to understand the complex relationships among climate change impacts and the myriad ecological processes interacting in dynamic environments.

In general, large-scale climate cycles can impact winds, currents, ocean mixing, temperature regimes, nutrient recharge, and affect the productivity of all trophic levels in the Pacific Ocean. These impacts are expressed as variability in stock size, recruitment, growth rates, or other factors. Pelagic fishes, as well as protected species that interact with the fisheries, are currently affected by these large-scale climate fluctuations and would continue to be affected in the same way under each of the alternatives. Climate change may impact the availability of tunas and this may in turn impact all pelagic fisheries; however, how and to what extent is not known. The effects of climate change on the status of stocks, stock complexes, protected resources, and the environment will continue to be part of the background environment that is considered in both ongoing management of fisheries of the western Pacific region and in considering the effectiveness and environmental impacts of future proposed fishery management actions. Climate change would not adversely affect the Council's ability to achieve the management objectives of this proposed action. Future impacts of climate change have been considered in

view of the potential cumulative impacts on fishery target and non-target species and protected resources.

Nothing in the proposed action will affect the distribution of the target pelagic species of the troll, longline, or purse seine fisheries that operate in the U.S. EEZ around American Samoa. None of the alternatives considered would result in large operational changes in any of these fisheries around American Samoa that would result in an increase in fuel consumption or emissions.

4.8.3 Cumulative Impacts

Cumulative impacts must be considered pursuant to the Council of Environmental Quality (CEQ) regulations 40 CFR 1508.7 which define cumulative impacts as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. None of the measures described here would change the objective of the proposed changes to the LVPA or result in cumulative impacts that are collectively significant.

There are wide-ranging factors (that change over time) that affect fishing participants as well as fishing communities. Current factors include high fuel costs, increased seafood imports, and restricted access to traditional fishing grounds. High fuel costs affect fishing participants in that it is simply increasingly expensive to go fishing without commensurate increases in gross revenues. The effect is that fishery participants may modify fishing behavior, switch to less fuel-intensive fisheries, or simply do not go fishing. The potential changes in the southern LVPA to achieve congruency with the Rose Atoll MNM are modest compared to the area accessible by the American Samoa-based large vessel fleets currently, and under the no action alternative. The action alternatives, including the proposed action are not expected to result in substantial changes in the conduct of American Samoa large vessel fisheries, that is, area fished, or effort and catch. Thus potential boundary changes of the southern LVPA are unlikely to influence the amount of fuel used on a typical fishing trip from American Samoa-based fleets and have an adverse effect on the environment.

In 2010, based on action by the Western Central Pacific Fisheries Commission (WCPFC), the Western Pacific Fishery Management Council recommended establishing a 2,000-mt bigeye tuna catch limit for the three U.S. territories of American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands through a draft amendment to the Pelagic Fisheries Ecosystem Plan. Language under WCPFC Conservation and Management Measure 2010-01 states that countries pursuing responsible fisheries development would have no limit to their bigeye tuna catch, or if already fishing for bigeye, a limit up to 2,000 mt would apply. The Council decided to take a precautionary approach in the draft amendment and has recommended establishing the 2,000-mt limit for each of the three territories.

Under the same measure, the Council is proposing that NMFS provide a mechanism for each U.S. territory to lease 750 mt of the 2,000 mt limit of bigeye tuna through a domestic charter vessel fishing arrangement in order to obtain funds for fisheries development. The charter

arrangement would not require all bigeye catch to be landed in the territory, but would require a minimum of three landings by the chartering party, contingent on suitable infrastructure to deal with the catch. This amendment is being considered primarily for the Hawaii-based longline fishery, which is subject to bigeye tuna catch limits in the WCPO. The proposed amendment to establish a bigeye tuna limit of 2,000 mt and potential lease arrangement would not interact with the proposed changes to the southern LVPA boundaries.

The Council is proposing changes to the American Samoa longline limited access program. As of June 9, 2011, there were two Class B vessel permits (40.1-50 ft in length) issued for the American Samoa longline fishery and three permits were still available to qualified applicants. Proposed longline permit changes recommended by the Council would increase accessibility for Class A (≤ 40 ft in length) and Class B permits in the longline fishery. There may be interest by Hawaii fishermen to obtain an American Samoa longline permit, even though it must be attached to a fishing vessel, since dual permit holders operating primarily from Hawaii can have their high seas bigeye tuna catch assigned to American Samoa's proposed 2,000 mt bigeye tuna catch limit (74 FR 63999; Dec. 7, 2009). Thus, there may be interest in acquiring the Class B permits, either to land bigeye tuna in Hawaii without it counting towards the U.S./Hawaii 2009-2011 annual catch limit of 3,763 mt, or because bigeye catches in American Samoa have recently been about 10-20 percent of the proposed 2,000 mt annual limit that would be established through the draft amendment and there is room for increased harvest (WPRFMC 2010, and unpublished American Samoa 2009 Pelagics Annual Report module). Although any longline fishing vessel with a Class B permit would need to be 40.1 to 50 ft in length under the current limited entry program, there are conventional monohull vessels of this size class in the Hawaii fishery, and it is likely that similar sized vessels could operate in American Samoa. Vessel Classes A and B would be combined and eligibility criteria would be relaxed under preferred alternative allowing more fishermen with vessels 50 ft and shorter access to latent permits. No cumulative impacts are expected from the proposed action of this regulatory amendment since the management provisions to fish within the LVPA would continue to apply, i.e., only pelagic vessels shorter than 50 ft would be eligible to fish within the this management area.

Other Council actions with respect to pelagic fisheries management in American Samoa include an amendment to the Pelagics FEP which would prohibit the use of FAD sets by purse seiners in the U.S. EEZ waters of the western Pacific. Purse seine fishery management in the U.S. EEZ around American Samoa is not expected to substantially impact the longline fishery in terms of its main target catch, albacore, since the target of purse seining is skipjack tuna, and to a lesser extent, yellowfin tuna.

5 Consistency with the Magnuson-Stevens Act and Other Laws

5.1 Consistency with National Standards

Section 301 of the Magnuson-Stevens Act requires that regulations implementing any FMP or FMP amendment be consistent with the ten national standards listed below.

National Standard 1 states that conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.

The preferred alternative considered in this amendment is consistent with NS 1 as the longline and purse seine fisheries may continue to achieve the optimum yield of albacore tuna and incidentally caught pelagic species, while avoiding overfishing. See the reference in section 7.3 for further information on the status of the target, non-target, and bycatch fish stocks.

National Standard 2 states that conservation and management measures shall be based upon the best scientific information available.

The preferred alternative considered in this amendment is consistent with NS 2, because the preferred alternative proposes an adjustment of the northern, eastern, and a portion of the southern boundaries of the LVPA around Tutuila, the Manua Islands, and Rose Atoll to align with the Rose Atoll MNM boundaries. The best available information, such as observer data, fishery logbook data, and most recent geographic information system data was used in developing and analyzing the alternatives.

National Standard 3 states that, to the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.

The preferred alternative considered in this amendment is consistent with NS 3 in that it does not directly affect management of South Pacific albacore tuna, which is the target stock in this fishery. This action proposes to modify the current LVPA around the islands of American Samoa. This action does not interfere with any existing management measures, which manage the target stock. The target stock's range extends throughout the western and central Pacific, and thus, it is managed on a domestic and an international basis through participation in regional tuna fishery management organizations.

National Standard 4 states that conservation and management measures shall not discriminate between residents of different States. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.

The preferred alternative considered in this amendment is consistent with NS 4 because it does not discriminate between residents of different states, nor does it allocate or assign fishing privileges.

National Standard 5 states that conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.

The preferred alternative considered in this amendment is consistent with NS 5 in that it intends to consider efficiency, such that, the LVPA are modified so that longline and purse seine fisheries may continue to efficiently harvest the target species with the minimum use of

economic inputs such as labor, capital, interest, and fuel. The preferred alternative would result in a minimal increase in the available fishing area to the longline and purse seine fleets (326 sq nm) and would not lead to substantial changes in fishing area, methods, and effort. The preferred alternative does not have economic allocation as its sole purpose.

National Standard 6 states that conservation and management action shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources and catches.

The preferred alternative considered in this amendment is consistent with NS 6 in that consideration was given to variations and contingencies in fishery resources and catches. The American Samoa limited entry longline fishery is largely targeting the same resource; therefore, implementing measures to modify the LVPA boundaries would benefit all participants. The longline and purse seine fisheries will continue to be monitored, which would allow for responses to changes in the fisheries, including future management actions.

National Standard 7 states that conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

The preferred alternative considered in this amendment is consistent with NS 7 by proposing measures to best achieve an adjustment of the northern, eastern, and a portion of the southern boundaries of the LVPA around Tutuila, the Manua Islands, and Rose Atoll to align with the Rose Atoll MNM boundaries.

The action is not duplicative as the LVPA and the Rose Atoll MNM were established to achieve entirely separate management objectives. The LVPA was established to provide a buffer between the small alia and troll vessels operating from the southern islands of American Samoa and large longline and purse seine vessels operating in the remainder of the U.S. EEZ around American Samoa. The Rose Atoll MNM was implemented to protect a near-pristine coral reef ecosystem at Rose Atoll.

National Standard 8 states that conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities.

The objective of this amendment is to maintain a viable longline fishery in American Samoa by proactively and cooperatively instituting measures to maintain the productivity of the longline fishery, while protecting the opportunities for small-scale pelagic fishing in the nearshore waters of American Samoa. As the longline fishery provides the people of American Samoa various economic benefits, ensuring that the fishery persists is consistent with NS 8. The preferred alternative aligns the boundaries with a minimal amount of change and additional area accessible to fishermen on large vessels. Therefore, the action would provide for the sustained participation of the fisheries while minimizing adverse economic impacts.

National Standard 9 states that conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided minimize the mortality of such bycatch.

The preferred alternative considered in this amendment is consistent with NS 9 because the measures are not anticipated to modify fishermen behavior, fishing methods or effort that may lead to any increases in bycatch.

National Standard 10 states that conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.

The preferred alternative considered in this amendment would not pose safety risks to fishery participants in the American Samoa longline fishery. The changes in the southern segment of the LVPA to achieve congruency with the Rose Atoll MNM are modest compared to the area fished by the American Samoa-based large vessel fleets under the status quo. The preferred alternative is not expected to result in substantial changes in the conduct of American Samoa large vessel fisheries, that is, area fished, or effort and catch. The American Samoa large vessel fisheries would continue to operate largely unchanged. Under the preferred alternative, all fishing vessels would continue to be required to adhere to all applicable regulations, which include considerations for safety-at-sea, and therefore, no impacts to safety are expected to occur.

5.2 National Environmental Policy Act

This regulatory amendment has been written and organized to meet the requirements of the National Environmental Policy Act and thus is a consolidated document including an environmental assessment, as described in NOAA Administrative Order 216-6, Section 603.a.2.

5.2.1 Coordination with Others

The proposed action described in this EA was developed in coordination with various federal and local government agencies that are represented on the Western Pacific Fishery Management Council. Specifically, agencies that participated in the deliberations and development of the proposed management measures include:

- American Samoa Department of Marine and Wildlife Resources
- Guam Department of Agriculture, Division of Aquatic and Wildlife Resources
- Hawaii Department of Land and Natural Resources, Division of Aquatic Resources
- Northern Mariana Islands Department of Land and Natural Resources, Division of Fish and Wildlife
- U.S. Coast Guard
- U.S. Fish and Wildlife Service
- U.S. Department of State

5.3 Executive Order 12866

To meet the requirements of Executive Order 12866 (E.O. 12866), NMFS requires that a Regulatory Impact Review (RIR) be prepared for all regulatory actions that are of public interest. This review provides an overview of the problem, policy objectives, and anticipated impacts of regulatory actions, and ensures that management alternatives are systematically and comprehensively evaluated such that the public welfare can be enhanced in the most efficient and cost effective way. Please see Appendix 2 for the Regulatory Impact Review of this action.

In accordance with E.O. 12866, the following is set forth: (1) This action is not expected to have an annual effect on the economy of more than $100 million or to adversely affect in a material way the economy, a sector of the economy, productivity, jobs, the environment, public health or safety; or state, local or tribal governments or communities; (2) This action is not likely to create any serious inconsistencies or otherwise interfere with any actions taken or planned by another agency; (3) This action is not likely to materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights or obligations of recipients thereof; (4) This action is not likely to raise novel or policy issues arising out of legal mandates, or the principles set forth in the Executive Order. Based on the information contained in this regulatory amendment, the initial findings of this action are determined to not be significant under E.O. 12866.

5.4 Administrative Procedures Act

All federal rulemaking is governed under the provisions of the Administrative Procedures Act (APA) (5 U.S.C. Subchapter II) which establishes a “notice and comment” procedure to enable public participation in the rulemaking process. Under the APA, NMFS is required to publish notification of proposed rules in the *Federal Register* and to solicit, consider and respond to public comment on those rules before they are finalized. The APA also establishes a 30-day waiting period from the time of a final rule is published until the rule become effective, unless an exemption is applicable. This amendment complies with the provisions of the APA through the Council’s use of public meetings, requests for comments, and consideration of comments. To implement this amendment, NMFS will publish a proposed rule and request public comments, and if approved or partially approved by the Secretary, publish a final rule with responses to public comments.

5.5 Coastal Zone Management Act

The Coastal Zone Management Act requires a determination that a recommended management measure will have no effect on the land, water uses, or natural resources of the coastal zone, or is consistent to the maximum extent practicable with an affected state’s enforceable coastal zone management program. NMFS will make such a determination to the appropriate state government agencies in American Samoa for review and concurrence.

5.6 Environmental Justice

On February 11, 1994, President William Clinton issued Executive Order 12898 (E.O. 12898), "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." E.O. 12898 provides that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." E.O. 12898 also provides for agencies to collect, maintain, and analyze information on patterns of subsistence consumption of fish, vegetation, or wildlife. That agency action may also affect subsistence patterns of consumption and indicate the potential for disproportionately high and adverse human health or environmental effects on low-income populations, and minority populations. A memorandum by President Clinton, which accompanied E.O. 12898, made it clear that environmental justice should be considered when conducting NEPA analyses by stating the following: "Each Federal agency should analyze the environmental effects, including human health, economic, and social effects of Federal actions, including effects on minority populations, low-income populations, and Indian tribes, when such analysis is required by NEPA. [5]

The preferred alternative would modify the LVPA to eliminate the incongruence with the Rose Atoll MNM, while maintaining protection for small vessel pelagic fisheries in Tutuila and the Manua Islands. This proposed action would impact all participants on an equal basis and would not have any unintended impacts to human health, economic, and social effects of Federal actions, including effects on minority populations, low-income populations, and Indian tribes.

5.7 Information Quality Act

The information in this document complies with the Information Quality Act and NOAA standards (NOAA Information Quality Guidelines, September 30, 2002) that recognize information quality is composed of three elements: utility, integrity, and objectivity. National Standard 2 of the Magnuson-Stevens Act states that an FMP's conservation and management measures shall be based upon the best scientific information available. In accordance with this national standard, the information product incorporates the best biological, social, and economic information available to date, including the most recent biological information on, and assessment of, the pelagic fishery resources and protected resources, and the most recent information available on fishing communities, including their dependence on pelagic longline and purse seine fisheries, and up-to-date economic information (landings, revenues, etc.). The policy choices, i.e., proposed management measures, contained in the information product are supported by the available scientific information. The management measures are designed to meet the conservation goals and objectives of this amendment to the Pelagics FEP and the Magnuson-Stevens Act. The data and analyses used to develop and analyze the measures contained in the information product are presented in this amendment. Furthermore, all reference materials utilized in the discussion and analyses are properly referenced within the appropriate sections of the environmental assessment. The information product was prepared by Council and

[5] Memorandum from the President to the Heads of Departments and Agencies. Comprehensive Presidential Documents No. 279 (February 11, 1994).

NMFS staff based on information provided by PIFSC and PIRO, and other sources. PIRO and PIFSC staff and NMFS Headquarters (including the Office of Sustainable Fisheries) reviewed the information product. Legal review was performed by NOAA General Counsel Pacific Islands and General Counsel for Enforcement and Litigation for consistency with applicable laws, including but not limited to the Magnuson-Stevens Act, National Environmental Policy Act, Administrative Procedure Act, Paperwork Reduction Act, Coastal Zone Management Act, Endangered Species Act, Marine Mammal Protection Act, and Executive Orders 13132 and 12866.

5.8 Paperwork Reduction Act

The purpose of the Paperwork Reduction Act (PRA) is to minimize the paperwork burden on the public resulting from the collection of information by or for the Federal government. The PRA is intended to ensure the information collected under the proposed action is needed and is collected in an efficient manner (44 U.S.C. 3501(1)). None of the alternatives establish any new permitting or reporting requirements, and is therefore not subject to the provisions of the PRA.

5.9 Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) (5 U.S.C. 601 et seq.) requires government agencies to assess and present the impact of their regulatory actions on small entities including small businesses, small organizations, and small governmental jurisdictions. The assessment is done via the preparation of an Initial Regulatory Flexibility Analyses (IRFA) and Final Regulatory Flexibility Analysis (FRFA) for each proposed and final rule, respectively. Under the RFA, an agency does not need to conduct an IRFA or FRFA if a certification can be made that the proposed rule, if adopted, will not have a significant adverse economic impact on a substantial number of small entities. Based on the preliminary evaluation of the economic impacts associated with the proposed alternatives, an initial regulatory flexibility analysis is not required and none has been prepared.

5.10 Endangered Species Act

Section 7.0 of this document provides reference to the threatened and endangered species that may be found in the action area, a subset of the EEZ around American Samoa. The ESA can allow a limited take of listed sea turtles during the otherwise lawful longline fishery through a biological opinion (BiOp) prepared by NMFS pursuant to section 7 of the ESA.

NMFS PIRO completed a BiOp for the American Samoa longline fishery completed on September 16, 2010. The 2010 BiOp considers and analyzes the measures proposed in the Council's preferred alternative in Pelagics FEP Amendment 5, intended to reduce the potential for further interactions between longliners and sea turtles. The BiOp concluded that the annual numbers of interactions and mortalities expected to result from implementation of the proposed action for a 3-year period is incidental take of up to 45 green sea turtles over three years (average of 15 interactions per year with 41 mortalities). The occasional hooking and entanglement (no more than 1 every 3 years per species) of hawksbill, leatherback, and olive ridley turtles is also expected (NMFS 2010). If the total number of authorized sea turtle interactions included in the

incidental take statement (ITS) during any consecutive 3-year period is exceeded, re-initiation of consultation will be required (50 CFR 402.16). After implementation of the proposed action and the period of years 1 through 3 has ended, a new 3-year ITS period will begin with years 2 through 4, and so on.

Pelagics FEP Amendment 5 requires all longline vessels greater than 40 ft in length to set all hooks to fish at least 100 m in depth. [6] NMFS determined in the 2010 BiOp (NMFS 2010) that the level of incidental take anticipated from the proposed action is not likely to jeopardize the survival of any listed species, or adversely modify critical habitat. As part of the section 7 consultation, NMFS also determined that Amendment 5 is not likely to adversely affect loggerhead turtles, sperm whales, or humpback whales, and will not affect blue, fin, or sei whales. Recent informal consultation with the USFWS concurred that, under Amendment 5, the American Samoa longline fishery is not likely to adversely affect the Newell's shearwater. The action area in the 2010 BiOp included the current LVPA; therefore, potential changes to the LVPA boundaries would likely not change the analysis or conclusions of that BiOp. The proposed fishery management alternatives for modifying the LVPA would not have an effect on protected species critical habitat, because none has been designated in American Samoa. NFMS does not expect a change in the American Samoa large vessel fishing operations (i.e., area, methods, and effort), therefore it is likely that the proposed action would not affect ESA-listed species or require re-initiation of section 7 consultation under the ESA.

There is little available information on protected species interactions with WCPO purse seine vessels; however, domestic vessels are operated in accordance with an international management regime, when implemented domestically, which includes consultations under section 7 of the Endangered Species Act. In November 2006, NMFS issued its Biological Opinion on the effects of the U.S. purse seine fishery in the WCPO on ESA-listed sea turtles and whales (2006 BiOp). Potential adverse effects on listed species were analyzed on aspects of the fishery identified to have potential adverse impacts including vessel traffic, gear deployment and retrieval, entanglement in FADs, and removal of fish biomass from the pelagic ecosystem (NMFS 2006). The purse seine effort that was considered in the Biological Opinion was based on the general trend of purse seine fishing effort being concentrated north and northwest of American Samoa.

The proposed fishery management alternatives for modifying the LVPA is not expected to change U.S. purse seine fishing practices. Therefore, the preferred alternative is not expected to trigger re-consultation of the 2006 BiOp, nor jeopardize the continued existence of any threatened or endangered species found in the EEZ around American Samoa.

5.11 Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA) prohibits, with certain exceptions, the take of marine mammals in the U.S. 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 gives the Secretary of Commerce authority and duties for all cetaceans (whales, dolphins, and porpoises) and

[6] Amendment 5 to the Fishery Ecosystem Plan for Pelagic Fisheries of the Western Pacific Region Measures to Reduce Interactions between the American Samoa Longline Fishery and Green Sea Turtles Including an Environmental Assessment, December 21, 2010. Western Pacific Fishery Management Council, Honolulu, Hawaii.

pinnipeds (seals and sea lions, except walruses). The MMPA requires NMFS to prepare and periodically review stock assessments of marine mammal stocks.

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. These categories are based on the level of serious injury and mortality of marine mammals that occurs incidental to each fishery. Specifically, the MMPA mandates that each fishery be classified according to whether it has frequent, occasional, or a remote likelihood of or no known incidental mortality or serious injury of marine mammals. The American Samoa longline fishery and the U.S. purse seine fishery are listed as Category II fisheries in the 2011 List of Fisheries (75 FR 68468; November, 8, 2010). This regulatory amendment is not expected to make substantial changes to the fishing effort, location, or catch; therefore, it does not require a MMPA category re-designation or other action.

Vessel owners and crew that are engaged in Category II fisheries may incidentally take marine mammals after registering or receiving an Authorization Certificate under the MMPA, but they are required to: 1) report all incidental mortality and injury of marine mammals to NMFS, 2) immediately return to the sea with minimum of further injury any incidentally taken marine mammal, 3) allow vessel observers if requested by NMFS, and 4) comply with guidelines and prohibitions under the MMPA when deterring marine mammals from gear, catch, and private property (50 CFR 229.4, 229.6, 229.7). The MMPA registration process is integrated with existing state and Federal licensing, permitting, and registration programs. Therefore, individuals who have a state or Federal fishing permit or landing license, such as the American Samoa limited entry longline permit, are currently not required to register separately under the MMPA.

In addition, fishers participating in a Category I or II fishery are required to accommodate an observer onboard their vessel(s) upon request (50 CFR 229.7); and fishers participating in a Category I or II fishery are required to comply with any applicable take reduction plans. NMFS may develop and implement take reduction plans for any Category I or II fishery that interacts with a strategic stock.

Section 8.0 in this document provides an analysis of the anticipated impacts on marine mammals under the alternatives considered by the Council. The Council expects that the alternatives would not substantially affect any marine mammal populations or habitat not previously considered.

5.12 Executive Order 13132 – Federalism

This action does not contain policies with federalism implications under E.O. 13132.

5.13 Essential Fish Habitat and Habitat Areas of Particular Concern

The preferred alternative is not expected to have adverse impacts on EFH or habitat areas of particular concern (HAPC) for species managed under all the Western Pacific Fishery Ecosystem Plans. EFH and HAPC for these species groups has been defined as presented in Table 4. The

alternatives will not adversely affect EFH or HAPC for any managed species, as they are not likely to lead to substantial physical, chemical, or biological alterations to the habitat, or result in loss of or injury to, these species or their prey. The alternatives are not anticipated to cause damage to the ocean or coastal habitats.

Table 4: EFH and HAPC for species managed under the Fishery Ecosystem Plans.

SPECIES GROUP	EFH (juveniles and adults)	EFH (eggs and larvae)	HAPC
Pelagics	Water column down to 1,000 m	Water column down to 200 m	Water column down to 1,000 m that lies above seamounts and banks with summits shallower than 2,000 m within the EEZ
Bottomfish	Water column and bottom habitat down to 400 m	Water column down to 400 m	All escarpments and slopes between 40-280 m, and three known areas of juvenile opakapaka habitat
Crustaceans	**Lobsters** Bottom habitat from shoreline to a depth of 100 m **Deepwater shrimp** The outer reef slopes at depths between 300-700 m surrounding every island and submerged banks in the Western Pacific Region	Water column down to 150 m Water column and associated outer reef slopes between 550 and 700 m surrounding every island and submerged banks in the Western Pacific Region	All banks with summits less than 30 m No HAPC designated for deepwater shrimp
Coral Reef Ecosystems	Water column and benthic substrate to a depth of 100 m	Water column and benthic substrate to a depth of 100 m	All Marine Protected Areas identified in FEPs, all PRIA, many specific areas of coral reef habitat (see FEPs)

Source: WPFMC 2009b, WPFMC 2009c, WPFMC 2009d, WPFMC 2009e, and WPFMC 2009f.
Note: All areas are bounded by the shoreline, and the outward boundary of the EEZ, unless otherwise indicated.

6 Draft Proposed Regulations

§ 665.806 Prohibited area management.

(b)(1) Tutuila Island, Manua Islands, and Rose Atoll (AS-1). The large vessel prohibited area around Tutuila Island, the Manua Islands, and Rose Atoll consists of the waters of the EEZ around American Samoa enclosed by straight lines connecting the following coordinates: [7]

Point	S. lat.	W. long.
AS-1-A	13°41’54”	167°17’
AS-1-B	15°23’10”	167°17’
AS-1-C	15°23’10”	169°00’42”

[7] Coordinates should be regarded as preliminary and subject to change.

AS-1-D	15°13’	169°00’42”
and from point AS-1-A westward along latitude 13°41’54” S. until intersecting the U.S. EEZ boundary with Samoa, and from point AS-1-D westward along latitude 15°13’ S. until intersecting the U.S. EEZ boundary with Samoa.		

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8 APPENDIX 1. Geographic data used to generate the geometry and areas enclosed by the various alternatives for modifying the LVPA around American Samoa.

Source: Lowe et al. 2010.

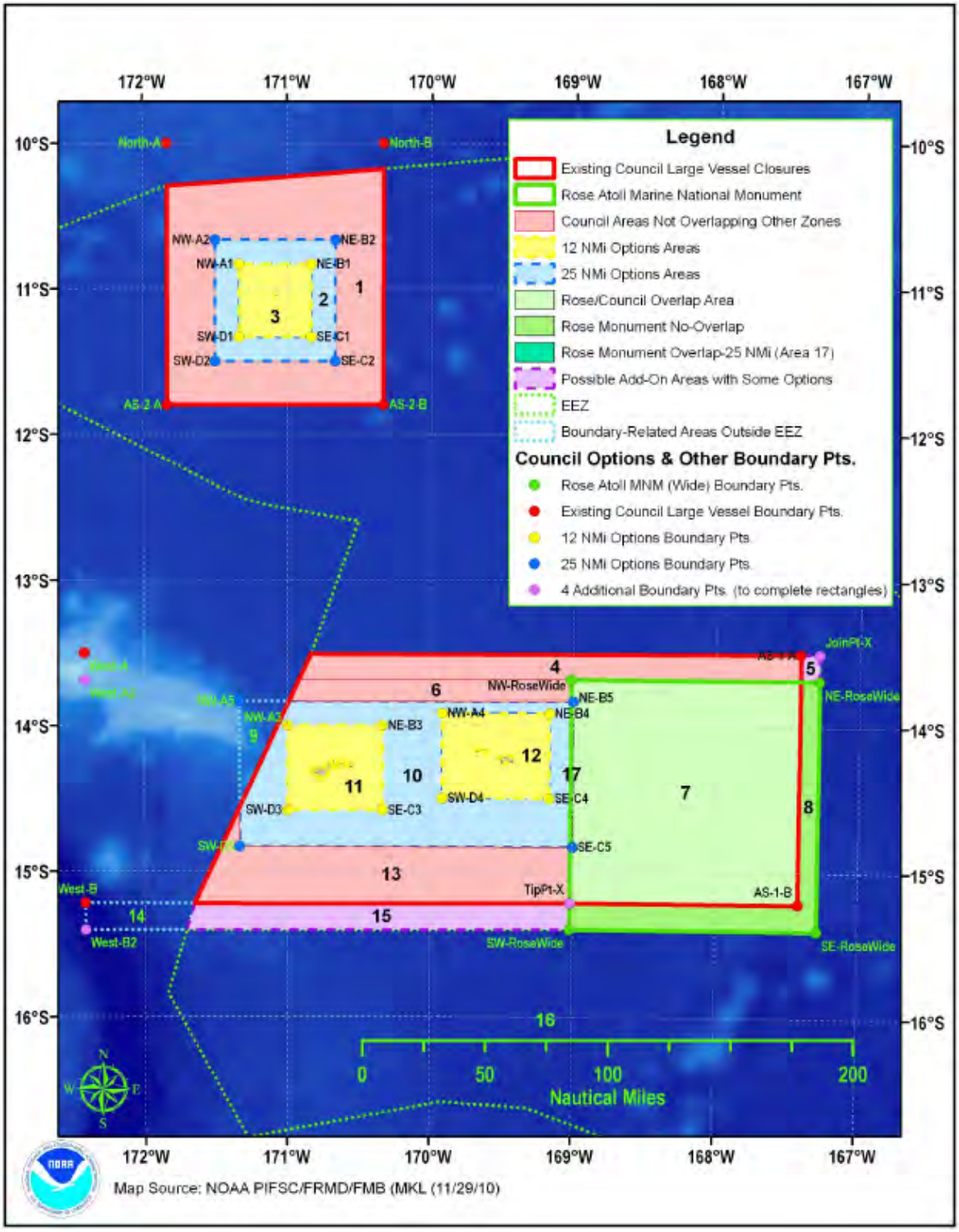

Figure 5: Council LVPA Regulatory Amendment Options and Boundary Points.

Table 5: Summary of the existing and potential fisheries management zones in the U.S. EEZ around American Samoa.

Type	Geographic Area			%EEZ	Notes
	Sq. Meters	Sq. Km.	Sq. Naut. Miles		
Emerged Land					
Tutuila Islands	137,742,845	137.74	40.16	0.03%	*Source Coastlines: TIGER Census*
Tutuila	135,993,016	135.99	39.65		*Source Coastlines: TIGER Census*
Aunu'u	1,526,140	1.53	0.44		*Source Coastlines: TIGER Census*
Other Islets	223,689	0.22	0.07		*Source Coastlines: TIGER Census*
Manu'a Islands	58,098,157	58.10	16.94	0.01%	*Source Coastlines: TIGER Census*
Olosega	5,252,404	5.25	1.53		*Source Coastlines: TIGER Census*
Ofu	7,190,353	7.19	2.10		*Source Coastlines: TIGER Census*
Ta'u	45,502,089	45.50	13.27		*Source Coastlines: TIGER Census*
Other Islets	153,310	0.15	0.04		*Source Coastlines: TIGER Census*
Swain's	3,586,765	3.59	1.05	0.0009%	*Source Coastlines: TIGER Census*
Rose Atoll (emerged)	82,226	0.08	0.02	0.00002%	*Source Coastlines: TIGER Census*
	Subtotal Emerged Lands	199.51	58.17	0.05%	
Water					*Source EEZ: VLIZ 2009*
WPRFMC Main Islands (no overlap)	48,682,430,889	48,682	14,194	11.99%	Am. Samoa Main Islands Longline Closed
WPRFMC/MNM (overlapping)	29,335,823,006	29,336	8,553	7.23%	Am. Samoa Main Islands Longline Closed
MNM Only (nonoverlapping)	6,205,969,541	6,206	1,809	1.53%	Rose Atoll Marine National Monument
WPRFMC Swains (no overlap)	28,300,407,572	28,300	8,251	6.97%	Swain's Longline Closed
Other EEZ (open)	293,221,104,147	293,221	85,490	72.23%	EEZ Only
	Subtotal Submerged EEZ	405,746	118,296.53	99.95%	
	Total EEZ	405,945	118,354.70		

* Adapted from a table provided to the Council in response to a February 2009 information request (IR-09-009)

Table 6: Detailed Additional Geographic Areas Relating to Options for Amending Large Vessel Prohibited Areas.

Figure*	"Building Block" Area(s) **	Zone	Sq. Km.	Sq. NMi
6	7+8+17	Rose National Monument	35,542	10,362
2 & 6	4+6+7+10+11+12+13+17	WPRFMC Large Pelagic Vessel Closure - MSI	77,933	22,722
2	1+2+3	WPRFMC Large Pelagic Vessel Closure - Swains	28,300	8,251
6	8	Nonoverlap Monument Area - MSI (L)	6,206	1,809
6	5	Excluded Small NE Corner - MSI (small square)	294	86
6	4	Nonoverlap WPRFMC Upper Rectangle - MSI	7,323	2,135
6	15	Nonoverlap Excluded Lower Rectangle - MSI	5,711	1,665
7	4+5+6+7+8+10+11+12+13+15+17	Option 2a: Rhomboid (including areas 5 & 7)	90,144	26,282
8	6+7+8+10+11+12+13+15+17	Option 2b: Rhomboid (move down WPRFMC area)	82,527	24,061
9	6+7+8+10+11+12+13+17	Option 2c: Kapakahi Rhomboid (cut off upper WPRFMC)	76,816	22,396
10	2+3+7+8+10+11+12+17 (incl. Rose)	Modified WPRFMC MSI - 25nmi Rectangle (MSI) & Rhomboid (Swains)	69,877	20,373
10	11	Modified WPRFMC MSI - 12nmi Western Rectangle	4,501	1,312
10	12	Modified WPRFMC MSI - 12nmi Eastern Rectangle	5,166	1,506
11	2+3	Modified WPRFMC Swains - 25nmi Rectangle	8,382	2,444
11	3	Modified WPRFMC Swains - 12nmi Rectangle	3,015	879
	16	Remaining EEZ (less all option-related areas & emerged lands)	287,216	83,739

Table Legend

* Figure Numbers reference a Council document entitled "Potential Modifications to American Samoa Large Pelagic Fishing Vessel (> 50 ft) Closure"(10/25/10 Draft).

** Building Block Areas reference this report (IR-10-034; Figure 2)

Table 7: Estimated Geographic Area of "Building Block" Zones Shown in Figure 5.

Zone	Description	Sq. Km.	Sq. NMi
1	Existing Council Large Vessel	19,918	5,807
2	Council 25 NMi No-MNM Overlap	5,367	1,565
3	Council 12 NMi No-MNM Overlap	3,015	879
4	Council LV May Subtract	7,323	2,135
5	Additional NE Rectangle to Make Monument and Council NE Corner Congruent*	294	86
6	Existing Council Large Vessel	3,429	1,000
7	Rose MNM Overlap Council	29,136	8,495
8	Rose Monument No-Overlap	6,206	1,809
9	Bounded Area Outside EEZ	1,490	434
10	Council 25 NMi No-MNM Overlap	16,286	4,748
11	Council 12 NMi No-MNM Overlap	4,501	1,312
12	Council 12 NMi No-MNM Overlap	5,166	1,506
13	Existing Council Large Vessel	11,892	3,467
14	Bounded Area Outside EEZ	1,609	469
15	Council Area 7 Add-On	5,711	1,665
16	Remaining Open EEZ	287,216	83,739
17	Small Area of 25 NMi Overlapping Rose MNM	200	58

9 APPENDIX 2. Regulatory Impact Review.

1. Introduction

The regulatory impact review (RIR) is required under Executive Order (E.O.) 12866 (58 FR 51735; October 4, 1993). The requirements for all regulatory actions are summarized in the following statement from E.O. 12866:

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.

2. Problem Statement and Management Objective

The U.S. EEZ around American Samoa contains two large vessel prohibited areas (LVPA) extending approximately 50 nm from shore that prohibit fishing with vessels 50 feet or longer for pelagic species.[8] The LVPA were implemented in 2002. In 2009, Presidential Proclamation 8337 established the Rose Atoll Marine National Monument (MNM), which further restricted fishing activities through the ban on commercial fishing within the Rose Atoll MNM boundaries extending 50 nm from the mean low water line of Rose Atoll. The monument's boundaries do not match the LVPA in the southern portion of the EEZ around Tutuila, the Manua Islands, and Rose Atoll.

The offshore area outside of the LVPA available for fishing by large vessels is approximately 87,299 square nautical miles (sq nm). However, the establishment of the Rose Atoll MNM in 2009 further reduced fishing area available to the large longline and purse seine fleets by approximately 1,809 sq nm, leaving a remaining 85,490 sq nm for large vessels to fish. In addition, the incongruent boundaries complicate compliance by fishermen, administration by management agencies, and enforcement efforts by enforcement agencies. The purpose of this regulatory amendment is to consider appropriate regulatory changes to address misalignment between the boundaries of the existing LVPA in the southern portion of the EEZ around American Samoa (around Tutuila, the Manua Islands, and Rose Atoll) and the more recently established Rose Atoll MNM. These modifications would facilitate administration and enforcement, and minimize potential confusion by fishermen since all the managed areas will be enclosed within a single area.

3. Description of the Fisheries

American Samoa-based Small-Scale Longline, Troll, and Large-Scale Longline Fisheries

[8] With the exception of two large longline vessels that operated within the LVPA prior to November 1997.

The American Samoa-based pelagic fisheries primarily consist of small and large-scale longlining, and pelagic trolling. Historically, most participants in the small-scale domestic longline fishery had been indigenous American Samoans with locally-built, catamaran vessels under 40 ft in length called alia. These fishermen generally had been using bottom fishing or trolling method of fishing, but in the mid-1990s, began using horizontal longline gear. The alia fishermen deployed a short monofilament longline, with about 350 hooks per set from hand-operated reels. Alia fishermen usually make single-day trips with a crew of three, targeting mainly albacore for the tuna canneries. In recent years, the alia longline fleet has greatly declined from 37 active vessels in 2001 to one or two vessels remaining active since 2007.

The composition of the American Samoa longline fleet began to change about 10 years ago with the influx of large (≥ 50 feet) conventional monohull longline vessels, including some vessels from Hawaii. These large monohull vessels are typically steel-hulled vessels of around 65-90 ft in length, operating hydraulically driven mainline reels holding 30-50 miles of monofilament, setting around 3,000 hooks per set with a crew of five to six. Most of these vessels are equipped with marine electronics for navigation, communication, and fish finding, and also have refrigeration systems to freeze catch on board.

More than 10.6 million pounds of fish were landed in American Samoa in 2010 from the longline and trolling fleets valuing approximately $10.5 million. Albacore comprised the vast majority of landings at almost 8.6 million pounds and almost 81 percent of total landings.[9] Albacore landings had decreased slightly relative to 2009 as 8.64 million pounds of albacore were landed in 2009. American Samoa federal longline logbook data indicate that the 26 longline vessels active in 2010, completed 264 trips, 4,496 sets and set 13,066,887 hooks. The number of active vessels remained the same as in 2009, but the number of sets decreased by 2 percent (NOAA, 2011(a)).

Prior to the establishment of the LVPA, catch by small and large longline vessels ranged from 179,456 lb to 1,205,057 lb between 1996 and 2002. From 2003-2009, total catch by longline vessels allowed to fish within the LVPA ranged from 155,221 to 584,805. Section 7.2 of this combined regulatory amendment and environmental assessment (EA) provides more detail on fishing in the LVPA, including composition of longline catch within the LVPA from 1996 to 2009.

U.S. Purse Seine Fishery

Under the current terms of the South Pacific Tuna Treaty, 45 purse seine licenses are available to the United States, five of which are reserved for joint venture arrangements with Pacific Island parties. The number of vessels licensed and active in the fleet had been steadily declining since the late 1990s. Since 2007, this trend has reversed and the number of vessels increased to 37 in 2010 (NOAA, 2011(b)).

[9] http://www.pifsc.noaa.gov/wpacfin/as/Pages/as_reportlanding.php Last updated June 28, 2011 and accessed September 9, 2011.

Most of the fishing activity by U.S. purse seine vessels in the WCPO occurs in areas between 5° N and 10° S latitude and 150° E and 170° W longitude in the EEZ waters of Papua New Guinea, the Federated States of Micronesia and other Pacific island nations, rather than in the vicinity of American Samoa. Purse seine activity in the U.S. EEZ waters around American Samoa is more likely during El Niño events.

The 37 vessels currently in the U.S. WCPO purse seine fleet range in length from 174 to 260 feet; crew sizes range from 18 to 36. From 1997 through 2007, the fleet placed about 8 percent of its fishing effort in the U.S. EEZ, 23 percent on the high seas, and the remainder in the EEZs of Pacific Island Parties (NMFS unpublished data).

U.S. purse seine vessels landed an estimated 246,133 metric tons of tuna in 2010, the vast majority of which comprised of skipjack tuna at over 215,000 metric tons. Other species were not reported for 2010. 2009 tuna landings were slightly higher at 282,848 metric tons (NOAA 2011(b)). The fish caught by the U.S. WCPO purse seine fleet are frozen onboard and either delivered directly to U.S. canneries or transshipped to carriers that deliver them to canneries, including those located in other countries.

Purse seine fishing has occurred sporadically in the U.S. EEZ around American Samoa and this fishing activity is summarized in Table 3 of the EA. The precise amount of fish and exact locations of sets within the LVPA or the EEZ is unknown; however, it appears that from 1998-2007, one purse seine set occurred in the area occupied by the southern portion of the Rose Atoll MNM.

Fishing Community in American Samoa

EEZ waters around American Samoa comprise 118,272 sq nm and are truncated by the EEZs around the other nearby island nations. Under the Magnuson-Stevens Act, American Samoa is recognized as a fishing community.

American Samoa has been a U.S. territory since 1899. The population of American Samoa is more than 89 percent native Samoan. American Samoa's small developing economy depends mainly on two primary income sources: the American Samoa Government, which receives income and capital subsidies from the Federal government and the fish processing industry on Tutuila. Prior to 2009, there had been two operating tuna canneries in American Samoa; however, one of two canneries, Chicken-of-the-Sea, closed in September 2009.

Until 2009, the canneries provided 8,118 jobs – 45.6 percent of total employment (in American Samoa) including both directly (5,538 jobs) and indirectly (2,580 jobs). The closure of the Chicken of the Sea (COS) cannery in 2009 resulted in the loss of 2,000 jobs or just over one third of the direct employment at the canneries. The remaining StarKist cannery has reduced its workforce to 1,200, or about 22 percent of the direct cannery employment, and 40 percent of the peak employment at this cannery of 3,000 jobs in 2008.[10] Recently, Tri-Marine, a fishing company supplying the canning industry has acquired the Chicken-of-the Sea cannery, which

[10] Recent information on cannery employment obtained from Agence France Presse news article dated May 13, 2010.

may include an association with another major fishing company, Luen Thai Fishing Venture, based in Hong Kong.

American Samoa is exempt from the Nicholson Act, which prohibits foreign ships from landing their catches in U.S. ports. Currently, no foreign vessels may fish in the EEZ around American Samoa and there are no foreign fishing access agreements at this time to provide access to foreign fleets.

See Amendment 5 to the Fishery Ecosystem Plan for Pelagic Fisheries of the Western Pacific Region for further information on the American Samoa fishing community.

4. Description of Alternatives

All of the Alternatives under consideration would apply to vessels longer than 50 ft (i.e., Class C and D vessels in the American Samoa longline limited entry fishery and all U.S. purse seine vessels. The no-action alternative, the preferred alternative (proposed action), and other reasonable alternatives that could be implement to align some of the LVPA boundaries with those of the Rose Atoll MNM are identified below.

Alternative 1 (No Action):
The no action alternative would maintain the current prohibited areas to large pelagic fishing vessels 50 ft and longer. The southern LVPA would remain at 22,722 sq nm or 19.2 percent of the EEZ. This is the baseline against which all alternatives are compared. Once regulatory language for management of the area is finalized and proclamation regulations are implemented, the southern and eastern portion of Rose Atoll MNM extending beyond the LVPA would add another 1,809 sq nm, for a total area closed to large fishing vessels of 24,531 sq nm, and occupy 20.7 percent of the EEZ.

Alternative 2:
Under this alternative, the southern large vessel prohibited area boundaries would be adjusted by increasing the distance from shore to the east by 8 nm and to the south by 11 nm, so that the eastern and southern boundaries would align with the Rose Atoll MNM. Under Alternative 2, the area of the southern LVPA would increase by an additional 3,560 sq nm to 26,282 sq nm and occupy 22.2 percent of the EEZ. (see Figure 2 of the EA).

Alternative 3:
Under this alternative, the northern boundary of the southern LVPA would be moved 11 nm closer to shore and the southern and eastern boundaries would be moved 11 nm and 8 nm away from shore to encompass the Rose Atoll MNM. Implementing Alternative 3 would increase the area in which large vessels are unable to fish by 1,339 sq nm to 24,061 sq nm and occupy 20.3 percent of the EEZ. The modified boundaries are depicted in Figure 3 of the EA.

Alternative 4 (Preferred):
The preferred alternative calls for moving the northern boundary of the LVPA 11 nm toward shore, while extending the eastern boundary and a portion of the southern boundary 8 and 11 nm, respectively, farther from shore to encompass the Rose Atoll MNM. This would reduce the area

closed to large vessels by 326 sq nm to 22,396 and occupy 18.0 percent of the EEZ (see Figure 4 of the EA).

5. Analysis of Expected Benefits and Costs of the Proposed Action

5.1 Changes in Net Benefits

The analysis emphasizes changes in net benefits to the U.S. national accounts; changes in net benefits that occur to foreign interests are not relevant in the context of this RIR. Benefits accrued as surplus to consumers measure the difference between the amount consumers are willing to pay for products or services and the amount they actually pay. Benefits accrued as surplus to producers measure the difference between the amount producers actually received for providing products or services and the economic cost producers bear to do so. In the case of fish harvesting operations, producer surplus can be measured by the difference between gross revenues and operating costs. Benefits and costs in both the private and public sectors are important with respect to net benefits to the national account; effects in both sectors are accounted for in this analysis to the extent possible. Quantitative projection of changes in benefits and costs is provided where possible, but in some instances only qualitative assessment can be made. Without information that could affect revenue and operating costs, such as where large vessels actually fish, the economic impacts will be assessed qualitatively.

Alternative 1 - No Action

Alternative 1 is the no action alternative. Under the no-action alternative, large vessels would continue fishing as is, operating with current boundaries in place. There would be no direct cost or benefit beyond the status quo associated with this alternative.

The continued separation of most large longline and purse seine vessels from the small longline and commercial and recreational trolling vessels operating from Tutuila and the Manua Islands would ensure a measure of protection for small vessels. This includes minimizing the potential for physical interactions between large and small vessels and localized resource depletion by the proximity of large vessels to small vessels within the same fishing grounds.

The no-action alternative would not align the southern LVPA boundaries with the Rose Atoll MNM. The lack of boundary alignments may confuse fishermen, who are likely more familiar with the LVPA boundaries than with the Rose Atoll MNM, since the monument was established more recently. Potential violations may occur as a result of a misunderstanding of permitted fishing areas for large vessels.

Alternative 2

Under Alternative 2, the LVPA boundaries around Tutuila, the Manua Islands, and Rose Atoll would no longer be incongruent with the boundaries of the Rose Atoll MNM. The elimination of the boundary incongruence between the southern LVPA and the Rose Atoll MNM should reduce potential confusion about where large vessels can fish once fishermen are notified of the change.

Alternative 2 proposes minor increases to the southern LVPA boundaries that are unlikely to have a major influence on the length of travel time for large longline and purse seine vessels in American Samoa before they are able to start fishing. The new boundaries may result in an

increase in outbound and inbound travel distances due to the expansion of the boundaries 8 nm to the east and 11 nm to the south relative to status quo. Alternative 2 would lead to an increase to the area closed to large vessels of 3,560 sq nm, which may result in a small to no reduction of landings for these large purse seine and longline vessels. Large longline vessels may face slightly increased catch competition in areas where large vessels are eligible to fish, during times when purse seine fishing activities around American Samoa are slightly higher, such as during El Niño years. However, purse seine activity within the EEZ around American Samoa is generally very limited. In terms of costs, large vessels that need to travel further than they would otherwise because of the boundary change proposed in Alternative 2 would bear minor increase in fuel and labor costs.

Small troll and longline vessels could benefit slightly, as could the two large longline vessels that are exempt from this rule. These benefits would come through the expansion of the area in which they could fish without having to interact with large vessels on which these regulations apply.

Alternative 2 is expected to have little to virtually no negative impact on the amount of tuna supplied to the sole American Samoa cannery, as the increase in the size of the LVPA is small compared to the remaining areas within the EEZ where large longline and purse seine vessels can continue fish. In addition, the cannery has many sources of tuna, including many of those landed by foreign fishermen. As a result, there should be no effect of canned tuna supply to the U.S. market as a direct result of the boundary change.
Implementation of measures under Alternative 2 should ease the administration and enforcement of fishing activities relative to status quo and hence reduce costs slightly to the Federal government, specifically those of NMFS and the U.S. Coast Guard.

Alternative 3
Under Alternative 3, the LVPA boundaries around Tutuila, the Manua Islands, and Rose Atoll would no longer be incongruent with the boundaries of the Rose Atoll MNM. The elimination of the boundary incongruence between the southern LVPA and the Rose Atoll MNM should reduce potential confusion about where large vessels can fish once fishermen are notified of the change.

Alternative 3 proposes changes to the southern LVPA boundaries that would result in a minor increase in the size of the LVPA, 1,339 sq nm. This increase in area where large vessels are prohibited from fishing is smaller than that being proposed in Alternative 2. The boundary changes are unlikely to have a major influence on the length of travel time for large vessel longliners and purse seiners in American Samoa before they are able to start fishing. The new boundaries may result in an increase in travel distance due to the expansion of the boundaries of 8 nm to the east and 11 nm to the south relative to status quo, but the contraction of the northern boundary of 11 nm could result in a reduction of travel distance for those large vessels that choose to fish north of the LVPA. The increase in the size of the LVPA is likely to result in very little reduction of landings for these large purse seine and longline vessels. Large longline vessels may face slightly increased catch competition in areas where large vessels are eligible to fish, during times when purse seine fishing activities around American Samoa may be slightly higher, such as during El Niño years. However, purse seine activity within the EEZ around American Samoa is generally very limited. In terms of costs, large vessels that need to travel

further than they would otherwise because of the boundary change proposed in Alternative 3 would see minor increase in fuel and labor costs.

Small troll and longline vessels might benefit slightly, as would the two large longline vessels that are exempt from this rule. These benefits would come through the expansion of the area in which they could fish without having to interact with large vessels on which these proposed regulations apply.

Alternative 3 is expected to have little to virtually no negative impact on the amount of tuna supplied to the sole American Samoa cannery, as the increase in the size of the LVPA is small compared to the remaining areas within the EEZ where large longline and purse seine vessels can continue fish. In addition, the cannery has many sources of tuna, including many of those landed by foreign fishermen. As a result, there should be no effect of canned tuna supply to the U.S. market.

Implementation of measures under Alternative 3 should ease the administration and enforcement of fishing activities and hence reduce costs slightly to the Federal government, especially NMFS and the U.S. Coast Guard.

Alternative 4 - Preferred

Under Alternative 4, the LVPA boundaries around Tutuila, the Manua Islands, and Rose Atoll will no longer be incongruent with the boundaries of the Rose Atoll MNM. The elimination of the boundary incongruence between the southern LVPA and the Rose Atoll MNM should reduce potential confusion about where large vessels can fish once fishermen are notified of the change.

Alternative 4 proposes changes to the southern LVPA boundaries that will result in a minor decrease in the size of the LVPA relative to status quo. Large vessels will see a small increase in size of the remaining areas within which they are allowed to fish. The boundary changes are unlikely to have a major influence on the length of travel time for large vessels based in American Samoa before they are able to start fishing. The new boundaries may result in a change in travel distance due to the expansion of 8 nm to the east and 0-11 nm to the south, but a decrease of 11 nm to the north, relative to status quo.

The areas in which large vessels would be allowed to fish would increase by 326 sq nm. The very small decrease in the size of the LVPA is likely to result in very little to no increase in landings for these large purse seine and longline vessels. However, large vessels that see an increase/decrease in travel distance as a direct result of the boundary change proposed in Alternative 4 would see minor increase/decrease in fuel and labor costs.

Relative to status quo, small trolling and longline vessels might have a very minor adverse impact, as would the two large longline vessels that are exempt from this rule. These impacts would come through the contraction of the area in which they could fish without having to interact with large vessels on which these proposed regulations apply.

Alternative 4 is expected to have little to virtually no positive impact on the amount of tuna supplied to the sole American Samoa cannery, as the reduction in the size of the LVPA is small

compared to the remaining areas within the EEZ where all U.S. large longline and purse seine vessels can continue fish. In addition, the cannery has many sources of tuna, including many of those landed by foreign fishermen. As a result, there should be no effect of canned tuna supply to the U.S. market as a result of the proposed boundary changes to the LVPA.

Implementation of measures under Alternative 4 should ease the administration and enforcement of fishing activities and hence reduce costs slightly to the Federal government, specifically those of NMFS and the U.S. Coast Guard.

5.2 Distributional Changes in Net Benefits

All of the alternatives is expected to have minor to no distributional effect among large and small vessels because the proposed measures lead to very small proposed changes in the size of LVPA compared with the entire EEZ within which large vessels can fish.

5.3 Changes in Income and Employment

All of the alternatives are expected to have very little to no effect on income and regional employment because the proposed measures lead to very small proposed changes in the size of LVPA compared with the entire EEZ within which large vessels can fish. In addition, U.S. income and employment in forward and backward linkages of this fishery might not be affected accordingly due to the fact that part of the equipment, fuel, supplies, and provisioning services are supplied by foreign businesses.

5.4 Cumulative Impacts

None of the alternatives considered here are expected to result in cumulatively significant adverse impacts when considered in conjunction with other existing or future conservation and management measures that affect the American Samoa-based fisheries.

6. Summary of the Significance Criteria

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

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

Based on the costs and benefits discusses in the RIR and the above criteria, none of the alternatives appear to have the potential to constitute a "significant" action under the E.O. 12866.

Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 et seq.) requires government agencies to assess and present the impact of their regulatory actions on small entities including small businesses, small organizations, and small governmental jurisdictions. All vessels affected by the proposed action are considered to be small entities under the current Small Business Administration definition of small fish-harvesting businesses, that is, their gross receipts do not exceed $4.0 million. This action has been certified as not expected to have significant impacts to a substantial number of small entities. As a result, an initial regulatory flexibility analysis is not required and none has been prepared.

References

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