



**WESTERN  
PACIFIC  
REGIONAL  
FISHERY  
MANAGEMENT  
COUNCIL**

**Regulatory Amendment Establishing Permit and Reporting Requirements  
for the  
Pelagic Troll and Handline Fishery in the U.S. Remote Island Areas  
of the Western Pacific Region**

August 23, 2000

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**Fishery Management Plan for the Pelagic Fisheries of the Western Pacific Region  
(includes EA/RIR and Draft Regulations)**

**Western Pacific Regional Fishery Management Council  
1164 Bishop Street, Suite 1400,  
Honolulu, Hawaii 96813**

## 1.0 Introduction

### 1.1 Summary

This regulatory measure will require any fishing vessel using troll or handline gear<sup>1</sup> to harvest pelagic management unit species (PMUS) in the Exclusive Economic Zone (EEZ) waters of the Pacific Remote Island Areas (PRIAs)<sup>2</sup> be registered for use under a PRIA pelagic fishing permit from the National Marine Fisheries Service (NMFS) and submit a federal logbook. The NMFS Pacific Island Area Office (PIAO) will develop the process for permit applications and the details for the logbooks.

The collection and analyses of reliable data are fundamental to assess the status and health of the stocks, evaluate the effectiveness of management measures, determine the need for changes in the management regime, prevent overfishing, determine and minimize bycatch, document protected species interactions, assess the potential impact of fishery interactions, and ensure the long-term health of the resource and industry.

Various management unit species (MUS) fisheries within the EEZ around American Samoa, Guam, Hawaii and the Northern Mariana Islands (NMI) are covered either by federal permit and logbook programs, or state and territorial data collection systems. However, other than for vessels registered under the Hawaii longline limited access permit or general longline permit, there are currently no federal permit or reporting requirements for vessels targeting PMUS in the EEZ waters around Howland, Baker, Jarvis, Wake, Midway, Palmyra, Kingman Reef, and Johnston Atoll. These islands are referred to collectively herein after as the Pacific remote islands areas (PRIAs).

In recent years, several Hawaii-based troll-handline vessels targeted pelagic and bottomfish stocks in the waters surrounding Palmyra Island and Kingman Reef. The expansion of fishing activity beyond the Hawaiian archipelago to the EEZ surrounding the PRIAs demonstrates the need to address this gap in data reporting requirements.

In addition, a charter fishery targeting PMUS exists at Midway Island<sup>3</sup>. Under the Magnuson-Stevens (M-S) Act the Western Pacific Fishery Management Council (Council) and the National NMFS are delegated the responsibility of regulating fishing within the EEZ around Midway

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<sup>1</sup>. Trolling gear, which usually consists of up to six lines rigged with artificial lures or occasionally live or dead bait, is towed by a vessel. Trolling gear is a variant of rod and reel gear, usually consisting of short fiber glass poles and hand-cranked reels. Therefore it is covered under rod and reel in the list of allowable gears.

2. Howland Island, Baker Island, Jarvis Island, Johnston Atoll, Midway Atoll, Kingman Reef, Palmyra Atoll, and Wake Island.

<sup>3</sup> Midway Sports Fishing (MSF) operates five vessels used for sportsfishing at midway; two 22' and one 26' Glacier Bay catamarans used for lagoon and nearshore fishing operations and two 38' Bertram III sportfishing vessels used for blue water trolling (Itano 1998).

Atoll. The United States Fish and Wildlife Service (USFWS) also regulates fishing within the Midway Atoll National Wildlife Refuge boundaries<sup>4</sup>. The Council and NMFS will work to obtain and exchange fishery data currently being collected by the USFWS. One possible mechanism for data exchange is the development of a formal memorandum of understanding between the NMFS, the Council and the USFWS. For the purpose of this measure these data will satisfy the federal logbook requirement for vessels fishing in the EEZ around Midway. This measure will require all Midway-based vessels catching pelagic management unit species to obtain a federal permit.

This regulatory action will address a deficiency in the existing data reporting system for vessels harvesting PMUS within the EEZ of the PRIAs. A federal permit program will enable tracking of vessels that fish within the PRIAs to ensure that the required catch reports are provided.

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<sup>4</sup> Under Executive Order 13022 the United States Fish and Wildlife Service (USFWS) assumed jurisdiction over Midway Atoll National Wildlife Refuge.

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### **1.3 Responsible agencies**

The Council was established by the Magnuson Fishery Conservation and Management Act to develop Fishery Management Plans (FMPs) for fisheries operating in the US EEZ around American Samoa, Guam, Hawaii, the Northern Mariana Islands and the US possessions in the Pacific.<sup>4</sup> Once an FMP is approved by the Secretary of Commerce, it is implemented by federal regulations which are enforced by the National Marine Fisheries Service and the US Coast Guard, in cooperation with state, territorial and commonwealth agencies. For further information, contact:

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<sup>4</sup> Howland Island, Baker Island, Jarvis Island, Johnston Atoll, Midway Atoll, Kingman Reef, Palmyra Atoll, and Wake Island.

## **2.0 Fishery management program**

### **2.1 Current Reporting and Record Keeping Requirements**

#### **2.1.1 Federal Reporting and Record Keeping Requirements**

The National Marine Fisheries Service (NMFS) collects catch data from vessels registered under the Hawaii longline limited access permit or general longline permit through the Western Pacific Daily Longline Fishing Logbook. Data are also collected by NMFS observers deployed on longline vessels principally to record interactions with marine turtles.

The 1988 South Pacific Tuna Act requires that US purse seine vessels fishing in the licensing area of the Multilateral Lateral Treaty on Fisheries report details of their catch. The reporting requirements of the Act do not apply to fishing activity within the US EEZ including the EEZ around the PRIAs. In some years, particularly during an El Nino event, purse seine catch and effort is substantial around Howland, Baker, Jarvis, and Palmyra<sup>5</sup>. To date, these vessels have generally been completing a South Pacific Regional Purse Seine Logsheet, although they are not required to, when fishing within the EEZ. The logsheet program is designed and administered by the Secretariat of the Pacific Community (SPC) and the Forum Fisheries Agency (FFA). Catch and effort data collected from the logsheets are stored at the NMFS SW Regional Science Center and the SPC in New Caledonia. Observers are deployed on the purse-seine vessels to monitor compliance and to collect ancillary information such as bycatch.

The United States Fish and Wildlife Service (USFWS) requires that Midway-based charter and recreational vessels fishing within the Midway Atoll National Wildlife Refuge file a float plan prior to a fishing trip and submit a "Midway Sports Fishing Boat Trip Log" upon completion of each trip.

#### **2.1.2. State and Territorial Reporting and Record Keeping Requirements**

##### American Samoa

Fish catch data are collected through creel surveys administered by the Department of Marine and Wildlife Resources (DMWR). During the early 1980s interview data were only collected in the bottomfish fishery from commercial vessels. Since 1985, the Offshore Creel Survey on Tutuila has examined both commercial and recreational boat trip catches at five designated sites. For two weekdays and one weekend day per week, DMWR data collectors sample offshore fishermen between 0500 and 2100 hours. Two DMWR data collectors based on Tau and Ofu collect fishing data from the Manua Islands fleet.

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<sup>5</sup> In 1997, US purse seiners landed approximately 36,971 metric tons of tuna caught in the EEZ of the PRIAs (Clarke 1999).

Data on fish sold to outlets on non-sampling days or caught during trips missed by data collectors on sampling days are accounted for in a separate dealer invoice data collection system. A vessel inventory conducted twice a year provides data on vessel numbers and fishing effort.

### Guam

The Division of Aquatic and Wildlife (DAWR) administers an offshore creel survey program that provides comprehensive estimates of island-wide catch and effort for all the major fishing methods used in commercial and recreational fishing. In 1982, the Western Pacific Fisheries Information Network (WPacFIN) began working with the Guam Fishermen's Cooperative Association to improve their invoicing system and obtain data on all fish purchases on a voluntary basis. Data are also collected from a major fish wholesaler and several retailers who make purchases directly from fishermen. These businesses voluntarily provide data to WPacFIN using invoices ("trip tickets") provided by DAWR.

### Hawaii

Historically, only Hawaii-based troll and handline vessels have fished in the PRIAs. To date there has been no fishing activities in the PRIAs conducted by small troll and handline boats from American Samoa, Guam, or the Northern Mariana Islands.

The State of Hawaii requires that any person who for commercial purposes takes marine life, whether caught or taken within or outside of the state, must first obtain a commercial marine license with the exception of longline vessels and albacore trollers. Vessels that fish in the PRIAs and then land their catch in Hawaii are required to report their catch on the State's C-3 form.

The State of Hawaii's Division of Aquatic Resources (HDAR) maintains a commercial landings database. The location of fishing effort is referenced by numbered geographic areas based on commercial fisheries statistical charts (Smith 1993). Under the current reporting system there are no geographic areas designated for the PRIAs and thus no means of entering catch and effort data from these areas into the State's commercial landings database.

High seas albacore troll vessels landing their catch in Honolulu are required to complete a HDAR Albacore Trolling Trip Report. This data form is a trip summary, does not document total effort or position fished and therefore does not meet the Council's need for data reporting for albacore trollers harvesting PMUS within the EEZ of the PRIAs.

### Northern Mariana Islands

The Northern Mariana Islands Division of Fish and Wildlife (DFW) monitors the commercial fishery by summarizing sales ticket receipts from commercial establishments. DFW staff routinely distribute and collect invoice books from 80 participating local fish purchasers on Saipan, including fish markets, stores, restaurants, government agencies and roadside vendors.



In 1988, the DFW implemented a creel survey program to monitor the boat-based (offshore) fishery to provide comprehensive estimates of island-wide catch and effort for all the major fishing methods (trolling, spearfishing, handlining, bottomfishing and net-fishing) used in commercial and recreational fishing. The creel survey program was discontinued in 1996 due to logistical problems.

## **2.2 Problems for resolution**

The collection and analyses of reliable data are fundamental to assess the status and health of the stocks, evaluate the effectiveness of management measures, determine the need for changes in the management regime, prevent overfishing, determine and minimize bycatch, document protected species interactions, assess the potential impact of fishery interactions, and ensure the long-term health of the resource and industry.

Various MUS fisheries within the Exclusive Economic Zone (EEZ) surrounding American Samoa, Guam, Hawaii and NMI are covered either by federal permit and logbook programs, or state and territorial data collection systems. However, other than for vessels registered under the Hawaii longline limited access permit and/or general longline permit, there are currently no federal reporting requirements for vessels targeting pelagic management unit species (PMUS) in the EEZ waters of the PRIAs.

Under current regulations longline vessels that fish in the EEZ waters around the PRIAs must be registered under either the Hawaii longline limited access permit or the longline general permit. In 1998 there was a significant increase of fishing effort in the PRIAs. Landings data for 1998 show that 19-20% of the total catch of the Hawaii-based longline fleet was taken in the EEZ waters surrounding Palmyra Island and Kingman Reef.

Concurrent with the expanding level of longline effort, two Hawaii-based troll and handline vessels, and one demersal longline vessel, targeting sharks, fished in the EEZ around Palmyra and Kingman Reef for PMUS. These vessels targeted both pelagic and bottomfish species, including yellowfin and bigeye tuna, wahoo, mahimahi, deep slope snappers and sharks. Over the four previous years there had been on average 18 longline trips per year targeting PMUS around Palmyra. Under current regulations troll and handline vessels are not required to be registered under a federal permit or submit a federal logbook to fish in these areas. In the absence of a permit and logbook requirement for these vessels and gear types, catch and effort data were not consistently reported for these fishing activities.

In addition, a charter boat and recreational fishery targeting PMUS exists at Midway Atoll. Midway Sports Fishing (MSF), a private company, operates five vessels used for charter fishing at Midway; two 22' and one 26' Glacier Bay catamarans used for lagoon and nearshore fishing operations and two 38' Bertram III sportfishing vessels used for blue water trolling (Itano 1998). In addition there are approximately seven small vessels maintained and used by Midway residents for recreational fishing. Of this total, three vessels engage primarily in offshore trolling

for PMUS including yellowfin tuna, ono and marlin (Shallenberger 1999 personal communication).

The Council is concerned about potential interactions between the Midway sport fish fishery and monk seals. There have been three documented cases of monk seals hooked at nearby Kure Atoll by recreational fishermen (Henderson 1998). Several documented interactions between recreational fishermen and monk seals have taken place in the main Hawaiian Islands (MHI). In 1994, a monk seal was found dead with a recreational hook lodged in its esophagus (Henderson 1998). At least seven other monk seals have been hooked by recreational fishermen. Henderson (1998) reports that three of these incidents involved fishermen targeting ulua (*Caranx* spp.). It is clearly evident that the sport fish fishery at Midway has the potential to interact with the endangered Hawaiian monk seal.

The Council is also concerned about interactions between Hawaii-based longline vessels and seabirds, particularly three species of albatross, the Black-footed, the Laysan, and the Short-tail. The Council is currently considering possible management measures to mandate the use of seabird mitigation devices and techniques by longline vessels. The Council is also concerned about potential seabird interactions with the charter boat fishery at Midway.

An estimated, 70% of the global population of the Laysan Albatross and 34% of the total breeding population of the Black-footed Albatross are found at Midway Atoll (Cousins and Cooper 1999; Gales 1998).

The Magnuson-Stevens Act requires the Council and the NMFS to manage and regulate fishing activities within the EEZ. The US Fish and Wildlife Service (USFWS) has concurrent statutory authority to regulate fishing within the Midway Atoll National Wildlife Refuge boundaries. Currently, the USFWS requires that charter and recreational vessels file a float plan prior to a fishing trip and submit a "Midway Sports Fishing Boat Trip Log" upon completion of its trip. This trip log does not include a field for protected species interactions that may occur.

The Magnuson-Stevens Act requires the Council to quantify trends in landings of the managed fishery resource by the commercial, recreational, and charter fishing sectors. This measure will address the significant gap in data reporting for the charter fishing sector at Midway.

The Council has determined that the boat trip log administered by the USFWS, with several modifications, could adequately address its need for comprehensive catch and effort data for the PRIAs. The necessary modifications include the collection of effort data (i.e., number of lines fished) and provisions by which protected species interactions can be documented on the existing forms. These vessels will be required to be registered for use under a PRIA pelagic fishing permit from the NMFS under this measure.

The Council and the NMFS will work with the USFWS to provide for the exchange of these data on a quarterly basis. This alternative for collecting catch and effort data for Midway-based

charter and recreational fishing activities would reduce the regulatory burden that would be imposed by a separate federal logsheet requirement. In the event it is not possible to arrange for data exchange, Midway-based vessels harvesting or landing PMUS within the EEZ around Midway may be required to submit a federal logsheet to NMFS.

### **2.3 Initial actions**

The Council, at its 95<sup>th</sup> meeting in American Samoa, determined the need to collect data on fishing activities not already covered by mandatory federal permit and logbook programs in the EEZ around the PRIAs.

The Council, at its 98<sup>th</sup> meeting, and the Scientific and Statistical Committee (SSC), at its 70<sup>th</sup> meeting reviewed an analysis of management alternatives to address outstanding data concerns. The Council and the SSC endorsed the preferred alternative of preparing a single, comprehensive regulatory amendment under the framework process that would simultaneously amend all FMPs.

On January 13, 1999, a meeting to discuss the comprehensive data regulatory amendment was held in the Council offices. Meeting participants included NMFS Pacific Islands Area Office and Honolulu Laboratory personnel and Council staff. The purpose of the meeting was to review the draft outline, discuss alternatives, and develop a plan of action and time line for completing the document.

On March 2, 1999, the Council prepared and distributed a summary of the issues relating to proposed comprehensive data regulatory amendment for public review and comment.

The Pelagics Advisory Panel, at its April 14-15, 1999 meeting, reviewed the proposed management measure and concurred with the need to implement a permit and logbook requirement for all troll and handline vessels harvesting PMUS in the PRIAs.

The Native and Indigenous Rights Advisory Panel, at its April 19-20, 1999 meeting, reviewed the proposed management measure and concurred with the need to implement a comprehensive federal permit and logbook requirement for all troll and handline vessels harvesting PMUS in the PRIAs.

The Pelagics Plan Team Meeting, at its May 12-14, 1999 meeting, examined the proposed State of Hawaii's new "Tuna Handline Trip Logsheet" and determined that the format of the log sheet would meet the data reporting need. The PPT recommended that non-longline fishing vessels harvesting PMUS in the EEZ surrounding the PRIAs fill out the State of Hawaii's "Tuna Handline Trip Report" to meet the federal logbook requirement. However, the form does not address protected species interactions.

The SSC recognized that, in the absence of regulatory framework provisions for these types of measures for the Bottomfish and Crustacean FMPs, it would be more expedient to focus on a

framework adjustment to the Pelagics FMP. The Scientific and Statistical Committee (SSC), at its May 18-20, 1999 meeting, examined the proposed State of Hawaii's new "Tuna Handline Trip Report" and determined that the format of the log sheet meets the data reporting need. The SSC concurred with the PPT recommendation to allow troll and handline vessels harvesting PMUS in the PRIAs to submit the State of Hawaii's new "Tuna Handline Trip Report" to meet the federal logbook requirement. However, the form does not address protected species interactions.

On May 28, 1999, the Council prepared and distributed a draft copy of the Regulatory Adjustments to the Fishery Management Plan for the Pelagic Fisheries of the Western Pacific Region for public review and comment.

The Western Pacific Fishery Management Council, at its June 15-18, 1999 meeting approved, the proposed regulatory adjustments to the Fishery Management Plan for the Pelagic Fisheries of the Western Pacific Region and directed Council staff to finalize the document.

## **2.4 Management objectives**

The following objectives of the Council's FMPs are relevant to the proposed management measure:

1. To improve the database for future decisions through data reporting requirements and cooperative Federal/State/Territory data collection programs.
2. To manage fisheries for management unit species in the Western Pacific Region to achieve optimum yield (OY)
3. To improve the statistical base for conducting better stock assessments and fishery evaluations thus supporting fishery management and resource conservation in the EEZ and throughout the range of the management unit species.

In addition, the Magnuson Act requires that any fishery management plan which is prepared by any Council, or by the Secretary, with respect to any fishery, shall:

Specify the pertinent data which shall be submitted to the Secretary with respect to commercial, recreational, and charter fishing in the fishery, including, but not limited to, information regarding the type and quantity of fishing gear used, catch by species in numbers of fish or weight thereof, areas in which fishing was engaged in, time of fishing, number of hauls, and the estimated processing capacity of, and the actual processing capacity utilized by, United States fish processors.

Establish a standardized reporting methodology to assess the amount and type of bycatch occurring in the fishery, and include conservation and management measures that, to the

extent practicable and in the following priority-- (A) minimize bycatch; and (B) minimize the mortality of bycatch which cannot be avoided.

Include a description of the commercial, recreational, and charter fishing sectors which participate in the fishery and, to the extent practicable, quantify trends in landings of the managed fishery resource by the commercial, recreational, and charter fishing sectors.

## **2.5 Management unit**

The management unit is defined as the EEZ around Howland Island, Baker Island, Jarvis Island, Johnston Atoll, Midway Atoll, Kingman Reef, Palmyra Atoll and Wake Island (Figure 1).

Midway Atoll is a National Wildlife Refuge in the Northwestern Hawaiian Islands. The principal species in this complex are listed in Section 4.1.1.

## **2.6 Management alternatives**

The Council considered the following options for addressing the current gaps in vessel permitting and catch and effort data reporting:

1. No action
2. Implementation of a comprehensive federal permit and logbook requirement to amend all FMPs simultaneously with a single omnibus framework amendment under the Bottomfish, Crustacean and Precious Corals Fishery Management Plans.
3. Adopt federal permit and reporting requirements for the MUS fisheries in the EEZ surrounding the PRIAs via separate adjustments under framework procedures of each FMP, beginning with the Pelagics FMP. This is the preferred management measure.

These alternatives are described in detail in section 3.0.

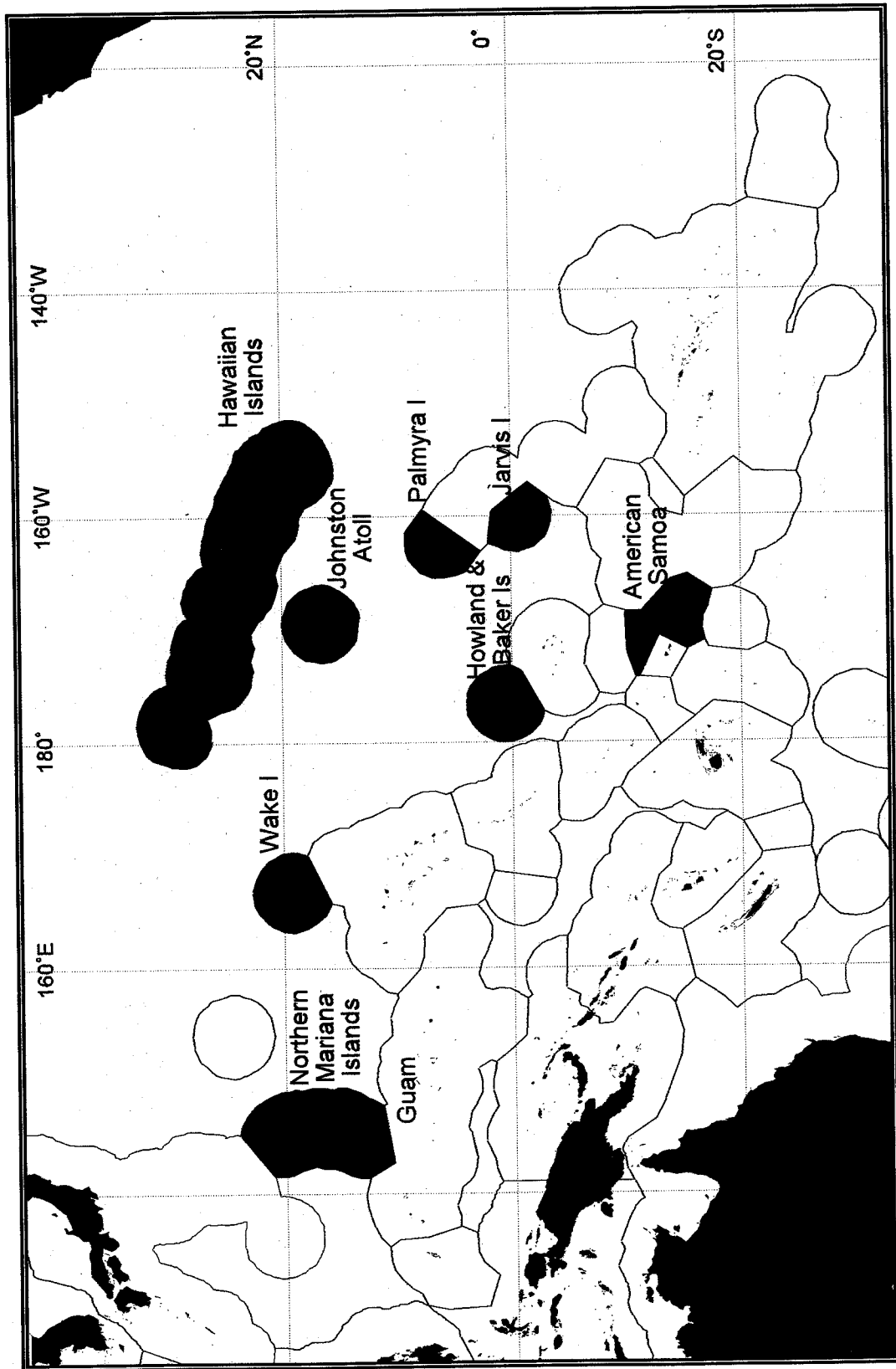
## **2.7 Preferred management measures**

This regulatory amendment will establish federal permit and logbook requirements for troll and handline fishing vessels harvesting PMUS in the EEZ of the Pacific Remote Island Areas. As noted, there are currently no federal permit or catch reporting requirements for troll and handline vessels targeting PMUS in the EEZ waters of the PRIAs with the exception of those required by the FWS for Midway-based fishing vessels fishing within the Refuge at Midway Atoll.

The Council has determined that the boat trip log administered by the USFWS, with several modifications, could adequately address its need for catch and effort data for Midway-based vessels fishery harvesting PMUS at Midway. The necessary modifications include the collection

of effort data (i.e., number of lines fished) and provisions by which protected species interactions can be documented.

As discussed above, the Council and the NMFS will work with the USFWS to arrange for the exchange of these data. One possible mechanism for the exchange of data is the development of a formal memorandum of understanding (MOU). The Council would like catch data provided on a quarterly basis to the NMFS and the Council.



**Figure 1.** Exclusive economic zones (EEZs) of the Pacific Islands.  
Western Pacific Regional Fishery Management Council EEZ area shown in gray.

The South Pacific albacore troll fleet is a high seas fishery that does not normally occur within the Council's area of management purview. The albacore troll fishery operates from December through early April, with 20-30 US vessels joining an international fleet (WPFMC 1995). This fishery operates on dense concentrations of albacore that form along the sub-tropical convergence zone that lies 35-47° S and 170-130° W.

Vessels of the albacore troll fleet routinely transit through Hawaii en route to the fishing grounds in the southern hemisphere and on their return northward. Due to the fact that commercial concentrations of albacore are found at much higher latitudes than the PRIAs it is highly unlikely that these vessels would ever conduct fishing operations in the EEZ surrounding the PRIAs. However, should these vessels conduct fishing operations within the EEZ around the PRIAs they will be required under this measure to be registered for use under a PRIA pelagic fishing permit and submit a federal logbook to NMFS.

## **2.8 Reporting and Record Keeping Requirements**

Under the preferred management measure all vessel operators of troll and handline vessels harvesting PMUS in the EEZ waters surrounding the PRIAs, with the exception of Midway, will be required to submit a catch report to the NMFS. Vessel operators shall provide data on location fished, trip duration, effort (i.e., lines fished, hours fished), catch, including incidental catch and discards) and protected species interactions. Any person who receives a permit under this regulatory action shall comply with the record keeping and reporting requirements as described in CFR Section 660.14. The Council will work with FWS to obtain catch and effort data for Midway-based fishing vessels.

## **3.0 Analysis of the impacts of management alternatives**

Preparation of a regulatory impact review is necessary to satisfy the requirements of the national standards, other parts of the Magnuson-Stevens Act and Executive Order 12866. The purpose of this section is to assist in understanding the relative biological, economic and social consequences of alternative management measures identified in this document.

### **3.1 Management objectives**

The objectives of the FMP that are relevant to this management measure are presented in Section 2.3.

### **3.2 Analysis of alternatives**

Whether action is taken or not, fishing effort for PMUS will continue within EEZ waters surrounding the PRIAs.



As stated, the level of vessels targeting pelagic management unit species in the EEZ waters of Palmyra expanded greatly in 1998. In 1998, 56 Hawaii-based longline vessels made 124 trips to fish within the EEZ of the PRIAs. In addition, at least two Hawaii-based troll-handline vessels targeted pelagic stocks in these areas on multiple trips. Due to the lack of federal data reporting requirements and deficiencies in the State of Hawaii's C-3 catch report form these catch data were not consistently reported.

A wide variety of development proposals have been put forth for the use of Palmyra Atoll. In addition to a proposal put forth by the United States Fish and Wildlife Service (USFWS) that Palmyra Atoll be designated a National Wildlife Refuge, there is interest in developing Palmyra Atoll as a transshipment and fish processing center.

The development of a troll and handline fleet capable of operating in the EEZ waters of the PRIAs is severely hampered by the lack of air freight and vessel services in these areas. The presence of an 6,500-foot airstrip on the Palmyra Atoll capable of handling C-130 jet airplanes means that fish could be transhipped out of Palmyra directly to markets in Asia and the west coast of the United States if airfreight service were established.

The most lucrative pelagic fishing operations in the Pacific are those producing high-grade fresh tuna. Should it become possible to air freight tuna out of Palmyra to fresh tuna markets in Asia, Hawaii and the west Coast of the United States, fishing activity in the PRIAs could expand dramatically in a relatively short period of time.

A wide variety of environmental factors affect the abundance of pelagic stocks from year to year. Levels of fishing effort are also subject to a variety of factors including fish abundance and market driven forces. Therefore it is difficult to predict short-term trends in fishing effort in the EEZ surrounding the PRIAs. However, over the long-term, fishing for pelagic management unit species in the waters of the PRIAs will in all likelihood continue to expand.

### **3.2.1 No Action**

This section draws on the best available information to examine the impact of taking no action and thus maintaining the status quo on the Council's ability to achieve the management objectives of the Council's FMPs relevant to the proposed management measure. The objectives of the FMP that are relevant to this management measure are presented in Section 2.3.

Historically, the only troll and pelagic handline vessels that have harvested PMUS in the PRIAs have been Hawaii-based. Due to the lack of federal permit and data reporting requirements and deficiencies in the State of Hawaii's C-3 catch report form, catch and effort data associated with Hawaii-based troll and handline fisheries in the PRIAs will continue to be poorly documented.

To date, no troll or handline vessels from American Samoa, Guam, or the Northern Mariana Islands have conducted fishing activities in the PRIAs. The existing data collection

methodologies currently established in each of these areas are described in section 2.1.2. Should an American Samoa, Guam, or Northern Mariana-based troll or handline vessel fish for PMUS in the EEZ of the PRIAs the Council would have to rely on these existing data collection systems to document this fishing effort. The current data collection systems for these other island areas are not standardized.

The preceding factors are inconsistent with objectives of the Council's Pelagics FMP presented in section 2.4.

Further, the lack of an adequate data reporting system for the harvest of PMUS in the PRIAs is inconsistent with the Magnuson-Stevens Act requirement that the Council establish a standardized reporting methodology to assess the amount and type of bycatch occurring in the fishery.

The no action alternative is also inconsistent with the Magnuson-Stevens Act requirement that the Council must, to the extent practicable, quantify trends in landings of the managed fishery resource by the commercial, recreational, and charter fishing sectors.

The no action alternative is inconsistent with US commitments and obligations under several international and domestic laws pertaining to the conservation and management of highly migratory species including the "Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas", the domestic legislation implementing this law, "The High Seas Fisheries Compliance Act", "Annex I of the Agreement for the Implementation of the Provisions of the United Nation Convention on the Law of the Sea relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks", and the Magnuson-Stevens Act.

The no action alternative fails to document catch and effort levels in the EEZ of the PRIAs. This information will be necessary to base future allocations should the need arise. Under the Multi-lateral High Level Conference (MHLC) allocation will likely be considered in the near future. Comprehensive and standardized catch reporting will establish a historical record on which to base allocation levels.

### **3.2.2 Implement a Comprehensive data regulatory amendment**

The Council initially considered amending the Pelagic, Bottomfish and Crustacean FMPs simultaneously with a single comprehensive document as the preferred alternative. However, both the Bottomfish and Crustacean FMPs will need to be amended to extend the current management areas designated under these FMPs to include the EEZ surrounding the PRIAs. This will require the preparation of a full amendment for both these FMPs, which will take approximately a year to complete. During this time important catch and effort data for the pelagic fishery will be lost.

**3.2.3 Preferred Alternative: implement federal permit and reporting requirements for the MUS fisheries in the EEZ surrounding the PRIAs via adjustments and/or amendments to each FMP separately, beginning with the Pelagics FMP.**

Under the preferred alternative, troll and handline fishing vessels harvesting PMUS in the EEZ waters of the PRIAs would be required to be registered for use under a PRIA pelagic fishing permit and submit catch logs if that vessel is used to fish for Pacific pelagic management unit species using rod and reel or handline gear in the EEZ around the U.S. island possessions in the Pacific. Longline vessels are already required to obtain permits and provide logbooks.

The Council has selected as its preferred alternative federal permit and reporting requirements for the MUS fisheries in the EEZ surrounding the PRIAs via regulatory adjustments to each FMP separately as the preferred alternative.

Unlike the Bottomfish and Crustaceans FMP, the EEZ surrounding the PRIAs has already been designated as part of the Pelagics FMP management area. Therefore, it is possible to implement a federal permit and logbook program for all troll and handline vessels targeting PMUS through a regulatory adjustment under the Pelagics FMP framework process. The amendment process is more formal than is warranted by the minor adjustment of regulations proposed by the Council for the Pelagics FMP.

With regard to the Midway-based vessels targeting PMUS at Midway Atoll, the Council has determined that the boat trip log administered by the USFWS, with several modifications, could adequately address its need for comprehensive catch and effort data for the PRIAs. The necessary modifications include the collection of effort data (i.e., number of lines fished) and provisions by which protected species interactions can be documented on the existing forms.

The Council and the NMFS will work with the USFWS to develop a program by which these data can be exchanged. It is desirable to have the catch data provided on a quarterly basis to the NMFS and the Council by the USFWS.

The preferred management measure is consistent with the following management objectives of the Pelagics FMP:

- 1) To improve the database for future decisions through data reporting requirements and cooperative Federal/State/Territory data collection programs.
- 2) To manage fisheries for management unit species in the Western Pacific Region to achieve optimum yield (OY)

- 3) To improve the statistical base for conducting better stock assessments and fishery evaluations thus supporting fishery management and resource conservation in the EEZ and throughout the range of the management unit species.

The preferred alternative is consistent with the goals and objectives of the Magnuson-Stevens Act pertaining to bycatch. The collection of data for PMUS fisheries conducted in the PRIAs will help the Council assess the level of bycatch associated with these fisheries. While the current level of pelagic troll and tuna handline fishing effort is low this could change rapidly under a variety of scenarios including the proposed development of Palmyra Atoll and its airstrip as a transshipment point for high value tuna to world and domestic markets.

The preferred alternative is also consistent with the Council mandate under the Magnuson-Stevens Act to quantify trends in landings of the managed fishery resource by the recreational and charter fishing sectors. This measure will address the gap in data reporting for the charter boat and recreational fishery sector at Midway. As stated, the collection and analysis of reliable data are fundamental to assess the status and health of the stocks, evaluate the effectiveness of management measures, determine the need for changes in the management regime, prevent overfishing, determine and minimize bycatch, document protected species interactions, assess the potential impact of fishery interactions, and ensure the long-term health of the resource and industry.

As previously discussed, the preferred management measure is consistent with US commitments and obligations under several international and domestic laws pertaining to the conservation and management of highly migratory species.

### **3.3 Analysis of expected costs and benefits**

#### **3.3.1 Regulatory Impact Review**

Executive Order 12866 (E.O. 12866) requires that a Regulatory Impact Review 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 the action, 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. In accordance with E.O. 12866, the following is set forth: (1) This rule is not likely 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 rule is not likely to create any serious inconsistencies or otherwise interfere with any action taken or planned by another agency; (3) This rule 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 rule 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 these findings, this rule is determined not be significant under E.O. 12866.

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) (RFA) requires that agencies assess and present the impacts of their proposed actions on small business entities. This measure will affect operators of troll and handline vessels which target pelagic management unit species in the EEZs surrounding the PRIAs. Based on historical data, it is estimated that 2 to 3 Hawaii-based vessels, and 3 Midway-based vessels have fished in these areas during recent years. Future increases in effort are difficult to predict but due to long travel distances, it appears unlikely that significant expansion will occur unless a transshipment station is established on Palmyra or another PRIA. Given that it is estimated that there are approximately 5,000 troll and handline pelagic fishing vessels based in Hawaii, American Samoa, Guam, and the Northern Mariana Islands, a threshold of impact of 20% of the universe of entities would be 1,000 vessels. It is extremely unlikely that this measure will impact 1,000 vessel operators. Further, this measure will not affect fishing operations and will have only a minor effect on permit application and data collection requirements. For these reasons it has also been determined to be not significant for the purposes of the Regulatory Flexibility Act.

### **3.3.2 Foreign fishing activities**

The nation of Kiribiti has expressed interest in fishing in the EEZ waters of Howland and Baker Islands. This would require the development of a Pacific Insular Area Fishery Agreement (PIAFA) between the United States and the Kiribiti. A PIAFA would allow access fees to be deposited in the treasury of the United States Government.

### **3.4 Rationale and net benefit discussion**

The principal motivation for implementing a federal permit and logbook requirement is to ensure availability of sufficient catch and effort data necessary to guide long-term management of the fishery resources under the Council's jurisdiction. This measure is also consistent with National Standard 2 of the Magnuson-Stevens Act which states that fishery management measures should be based on the best scientific information.

The expansion of fishing activity beyond the Hawaiian archipelago to the PRIA EEZs underscores the need to address the omissions in data reporting requirements in the Western Pacific Region. The proposed management measure will implement federal permits and comprehensive and standardized data reporting for all troll and handline fishing vessels harvesting within the EEZ around the PRIAs.

The regulatory adjustment will help to improve documentation of protected species interactions. Changes in data reporting requirements will provide an opportunity for documentation of interactions with protected species such as marine turtles, marine mammals and birds. Further, bycatch in some fisheries continues to be undocumented, particularly in pelagic troll and handline fishing. This amendment will address this problem for pelagic troll-handline fisheries in the PRIAs.

The management arrangement emerging from the Multilateral High-Level Conference series on the Conservation and Management of Highly Migratory Stocks will likely consider allocation of pelagic stocks within its area of competence<sup>6</sup>. One of the principal criteria for allocation under the articles being negotiated through the MHLC process is a documented history of fishing. The collection of catch data from the PRIAs by vessels currently harvesting tunas and associated species will be of critical importance in any future allocation of the resources.

### **3.5 Consistency of preferred management measure with applicable national standards for fishery conservation and management**

*National Standard 1 -- 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.*

Most of the pelagic fish taken in the EEZ around the PRIAs are part of large stocks that extend over much of the tropical and sub-tropical Pacific. Hawaii-based troll and handline vessels target pelagic stocks in these areas. Due to the lack of federal data reporting requirements and deficiencies in the State of Hawaii C-3 form these catch data may not have been reported consistently. The preferred management measure will help enable the Council to conserve and manage these resources, and thus prevent overfishing and achieve, on a continuing basis the optimum yield of the pelagic fishery in the PRIAs.

*National Standard 2 -- Conservation and management measures shall be based upon the best scientific information available.*

The preferred management measure will establish a logbook and permit requirement for troll and handline vessels harvesting PMUS in the PRIAs. These measures will enhance the Council's ability to conserve and manage the fishery resources under its jurisdiction by improving the data base available to make management decisions.

*National Standard 3 -- 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 proposed management measure is consistent with National Standard 3. Collection of data on catch and fishing effort for troll and handline vessels harvesting PMUS within the EEZ around

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<sup>6</sup> The fourth Multilateral High Level Conference (MHLC) was convened in Hawaii between 10-19th February 1999. The MHLC series is developing a management arrangement for tuna and tuna like species in the Central-Western Pacific through negotiations between the Pacific Islands nations and territories, the major metropolitan tuna fishing nations of SE and E Asia (Indonesia, Philippines, China, Japan, Korea, Taiwan) and the USA. The area of management competence will include the entire Western Pacific Region. The MHLC process appears to be on schedule with an expected treaty establishing a management commission by the end of the year 2000.

the PRIAs will strengthen the Council's ability to participate in the management of PMUS on a stock-wide basis in the Pacific.

*National Standard 4 -- 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 proposed management measure is consistent with National Standard 4. The proposed management action does not discriminate between residents of different states. By mandating that vessels currently not required to do so submit logbooks and obtain a permit to fish in the EEZ waters of the PRIAs, it will document these vessels' participation in the fishery. Should it become necessary to allocate or assign fishing privileges at some future time, establishing a history of participation in the fishery is essential for a fair and equitable allocation of the resource among various user groups.

*National Standard 5 -- 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 proposed management measure is consistent with National Standard 5. Implementing permitting and data reporting requirements for all vessels participating in fisheries in the EEZ of the PRIAs will fully document the level of participation and economic investment in fisheries conducted in the EEZ of the PRIAs. This information is necessary to assess the efficiency of any future regulatory measures.

*National Standard 6 -- Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.*

The proposed management measure is not inconsistent with National Standard 6.

*National Standard 7 -- Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.*

The proposed management measure is consistent with National Standard 7. This measure will establish record-keeping and reporting requirements for the purpose of gathering information from the public. Therefore careful consideration has been given to minimizing to the extent practicable any additional burden on the public and avoiding unnecessary duplication.

*National Standard 8 -- 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 proposed management measure is not inconsistent with National Standard 8.

*National Standard 9 -- 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 proposed management measure is consistent with National Standard 9. Implementing comprehensive permitting and data reporting requirements for all troll and handline vessels participating in fisheries for PMUS in the EEZ around the PRIAs will help document the level of bycatch associated with these fisheries.

*National Standard 10 -- Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.*

The preferred management measure is not inconsistent with National Standard 10.

#### **4.0 Supporting material**

##### **4.1 Description of the stock(s) comprising the management unit**

###### **4.1.1 Pacific Pelagic Management Unit Species (PMUS) or group of species and their distribution**

The Pacific pelagic management unit species (PMUS) commonly caught in pelagic fisheries in the EEZ around the PRIAs are listed in Table 4.1. All the PMUS species harvested are part of larger populations which are contiguous throughout most of the tropical and sub-tropical Pacific Ocean.



**Table 4.1. Pelagic management unit species**

English Common Name	Scientific Name
Albacore	<i>Thunnus alalunga</i>
Yellowfin tuna	<i>T. albacares</i>
Indo-Pacific blue marlin	<i>Makaira mazara</i> :
Bigeye tuna	<i>T. obesus</i>
Oceanic sharks	Alopiidae, Carcharinidae, Lamnidae, Sphynidae
Mahimahi (dolphinfish)	<i>Coryphaena</i> spp.
Wahoo	<i>Acanthocybium solandri</i>
Sailfish	<i>Istiophorus platypterus</i>
Swordfish	<i>Xiphias gladius</i>
Other tuna relatives	<i>Auxis</i> spp, <i>Scomber</i> spp; <i>Allothunus</i> spp
Skipjack tuna	<i>Katsuwonus pelamis</i>
Striped marlin	<i>Tetrapturus audax</i>
Shortbill spearfish	<i>T. angustirostris</i>
Pomfret	family Bramidae
Oilfish family	Gempylidae
Moonfish	<i>Lampris</i> spp
Kawakawa	<i>Euthynnus affinis</i>
Dogtooth tuna	<i>Gymnosarda unicolor</i>

#### 4.1.1.1 Abundance and present condition of PMUS

There are no obvious signs that fisheries across the Pacific have had a serious negative impact on skipjack or yellowfin stocks (SPC 1997). There is concern over a five year continuous decline in the CPUE of large yellowfin in Japanese purse seine catches, but changes in both targeting and fishing grounds over the same period of time confound interpretations of the change in the CPUE. Studies indicate that there is little, if any, separation of eastern and western Pacific bigeye stocks, but the longline CPUE for the eastern Pacific has been decreasing while that for the western Pacific is stable. Analysis of the eastern Pacific data indicated that catch levels in that region may be nearing full exploitation. Lack of complete information on bigeye mortality and exploitation rates makes it difficult to determine the status of Pacific bigeye stocks.

Analyses conducted by the South Pacific Commission (SPC 1997) on the South Pacific albacore stock as a whole suggest that total catches have been stable over the past several years, although the success of the troll fishery in the sub-tropical convergence zone has been variable. The CPUE of Asian longline vessels has been stable or increasing in recent years and there is no evidence in the data that current levels of fishing are having an overall adverse affect on the stock. However,

SPC (1997) notes that analysis of tagging and length frequency data indicate relatively slow growth and low mortality rates for South Pacific albacore, compared to the tropical tunas such as bigeye and yellowfin. The fisheries potential of albacore is therefore thought to be more restricted by comparison with the tropical tunas.

Less is known about the status of billfish in the Central and Western Pacific. Most billfish are taken incidentally during longline operations targeting tuna, apart from swordfish which are targeted by longliners in the higher latitudes north and south of the equator. While most studies suggest that Pacific billfish stocks are healthy, there is considerable uncertainty in the quality of data and the methods used to evaluate the trends (WPFMC 1998).

#### **4.1.1.2 Probable future condition**

##### **4.1.1.2.1 Potential fishery induced changes**

The future condition of the component PMUS stocks occurring in the EEZ around PRIAs will be affected by changes in the size and composition of pelagic fishing fleets operating both within and outside the EEZ of these areas. Predicting what these changes may be is difficult. Perhaps the source of uncertainty which could have the greatest impact on the pelagic fisheries within the Council's jurisdiction is the international arrangement currently being negotiated to manage highly migratory fish stocks in the central and western Pacific. Participants in the negotiations recognize that in order for a multilateral arrangement to achieve its objective of conserving and managing stocks, it will need to agree on catch limitations, either directly, through quotas, or indirectly through a limit on fishing effort. Decisions have not yet been made regarding the approach to catch and/or effort limitation and where, when and by whom the fish will be caught.

##### **4.1.1.2.2 Potential environmental influences**

Environmental variables have a considerable influence on the abundance and condition of pelagic fish stocks. The three tropical tunas, skipjack, yellowfin and bigeye, and billfish such as blue and striped marlin, prefer waters ranging in temperature from 18-31° C, whereas subtropical fish such as albacore and swordfish prefer cooler waters ranging from 10-25° C. Abundance of these tropical and sub-tropical stocks is predicated on the abundance of prey items which in turn may be the result of a physical structure such as a seamount, or an oceanographic feature such as a frontal system where two different water masses converge.

The largest and strongest environmental influence on pelagic stocks in the western Pacific are El Niño-Southern Oscillation (ENSO) events<sup>7</sup>. ENSO events are associated with a weakening of

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<sup>7</sup> The Southern Oscillation Index is the difference between the barometric pressure recorded in Northern Australia and French Polynesia. Normally, the pressure differential leads to prevailing easterly trade winds. During an El Niño the pressure gradient reverses, the trade winds fail and warm ocean water in the western Pacific spreads eastwards into the central and eastern Pacific (Philander 1983).

the prevalent easterly trade winds in the tropical Pacific and an eastward shift of the western Pacific warm pool, the warm water mass that lies between New Guinea and the Micronesian islands.

Lehodey et al. (1997) note the presence of a permanent convergence of surface-layer water masses at the eastern edge of the western Pacific warm pool. This convergence zone is identified by a well marked salinity front induced by westward advection of cold, saline water from the central-eastern equatorial Pacific encountering a sporadic eastward advection of warm, low-salinity water from the western equatorial Pacific. Convergence zones and fronts are important mechanisms for aggregating plankton and micro-nekton, which, in turn, draw larger predators such as tuna.

The eastward displacement of the warm pool during an ENSO event results in a greater abundance of skipjack and yellowfin tuna in the central Pacific (SPC 1997; Lehodey et al. 1997). Further, ENSO events appear to have a negative impact on recruitment of South Pacific albacore, with poor recruitment following albacore spawning during an ENSO event, and good recruitment following spawnings during *La Niña* periods when the Southern Oscillation Index is strongly positive (SPC 1997).

The expansion of longline effort in 1998 in the EEZ surrounding Palmyra and Kingman Reef was due to the presence of bigeye tuna. Fishermen believe that the strong *El Niño* event of 1997-1998 played a significant role in creating the environmental conditions that led to large numbers of bigeye tuna aggregating near Palmyra and Kingman.

#### **4.2 Description of fishing activities affecting the stock(s) comprising the management unit**

##### **4.2.1 Vessel characteristics and fleet composition**

###### Troll and Handline Fleet

###### PRIAs

In 1998, two Hawaii-based troll and handline vessels, and one demersal longline vessel, targeting sharks, fished in the EEZ around Palmyra and Kingman Reef for PMUS. These vessels targeted both pelagic and bottomfish species, including yellowfin and bigeye tuna, wahoo, mahimahi, deep slope snappers and sharks. In the absence of a permit and logbook requirement for these vessels and gear types, catch and effort data were not consistently reported for these fishing activities.

In addition, a charter boat fishery targeting PMUS exists at Midway Atoll. Midway Sports Fishing (MSF) operates five vessels used for charter fishing at midway; two 22' and one 26' Glacier Bay catamarans used for lagoon and nearshore fishing operations and two 38' Bertram III

sportfishing vessels used for blue water trolling (Itano 1998). In addition there are approximately seven small vessels maintained and used by Midway residents for recreational fishing. Of this total, three vessels engage primarily in offshore trolling for PMUS including yellowfin tuna, ono and marlin (Shallenberger 1999 personal communication).

All vessels fishing at Midway are required to file a float plan prior to a fishing trip and complete the "Midway Sports Fishing Boat Trip Log" upon completion of its trip. The USFWS compiles these catch data. 1996 was the first full year that the catch reports were required. While there was initially some problem with compliance with the catch report requirement it has since improved (Shallenberger 1999 personal communication).

### Hawaii

Pelagic troll and handline fisheries occur throughout the Western Pacific region. These fisheries target large pelagic species such as yellowfin, bigeye, albacore, blue marlin, mahi mahi and wahoo. Trollers fish in areas where water masses converge and where the bottom topography changes dramatically, such as near seamounts.

The troll and handline fishery in Hawaii includes several components: 1) recreational-subsistence, 2) charter sector, 3) part-time commercial, and 4) full-time commercial (Boggs and Ito 1993). The various segments of the fishery use the same gear and techniques, but differ in catch composition, vessel size, fishing effort and catch disposition. Charterboats target and catch more marlin (40-50% by weight) while commercial trollers target and catch more yellowfin tuna (about 80% by weight) (WPFMC 1995).

Handline fishing is an ancient technique developed by the Polynesians and Micronesians to catch yellowfin and bigeye tuna. In Hawaii, the handline fishery consists of an onshore and offshore components. Handline vessels engage in either night ("*ika-shibi*" or squid-tuna) or day ("*palu-ahi*" or chum-tuna) fishing (WPFMC 1995).

In Hawaii, there are over 1,500 licensed troll and handline vessels (Coan et al 1997). In 1997, there were 23,129 commercial troll trips and 5,697 commercial handline trips reported in the MHI (WPFMC, 1998). In 1997, commercial troll-handline vessels landed 1897 mt of tuna in Hawaii (WPFMC 1998).

In 1997, the combined commercial troll-handline landings of all PMUS in Hawaii were estimated at 2024 mt (WPFMC 1998).

### American Samoa

In American Samoa prior to 1995, pelagic fisheries were largely a troll-based fishery. In 1997, 54 vessels made an estimated 2,990 trips, comprised of 817 trolling trips and 2,173 longline trips. In this year, troll vessels landed an estimated 28 mt of tuna (WPFMC 1998).

## Guam

In Guam, virtually all the landings of pelagic fish are made by trolling vessels. There are an estimated 464 small boats that participate in the pelagic fishery. In 1997, total landings of all pelagics was estimated at 341 mt. Landings of PMUS consist primarily of five major species, mahi mahi, wahoo, skipjack tuna, yellowfin tuna, and Pacific blue marlin (WPFMC 1998).

## CNMI

Trolling is virtually the only fishing method used to harvest PMUS in the pelagic fishery in CNMI. In 1997, 132 vessels were identified as being involved in full-time commercial fishing with an additional 101 classified as part-time. In 1997, approximately 58 mt of tuna were landed by the commercial pelagic troll fishery (WPFMC 1998).

## Longline Fleet

### PRIAs

In 1998, 56 Hawaii-based longline vessels made 124 trips to fish in the EEZ around Palmyra and Kingman Reef. These vessels made a total of 884 sets, setting 1,623,121 hooks. Landings data for 1998 show that 19-20% of the total longline catch of the Hawaii-based fleet was taken in the EEZ waters surrounding Palmyra Island and Kingman Reef.

## Purse Seine Fleet

In 1998, 39 US purse seine vessels fished in the central-western Pacific (Coan et al. 1998). The bulk of the US purse seine fishing activity occurs primarily in the equatorial western Pacific, principally in the EEZ of Papua New Guinea, the Federated States of Micronesia, and Kiribati. However, the US purse seine fleet does operate inside the EEZ surrounding Palmyra, Howland, Baker, and Jarvis (WPFMC, 1998). In 1997, purse seiners landed approximately 36,971 metric tons of tuna caught in the EEZ of the PRIAs (Clarke 1999).

The eastward displacement of the warm pool during an ENSO event results in a greater abundance of skipjack and yellowfin tuna in the central Pacific (SPC 1997; Lehodey et al. 1997). As a result of the strong El Niño-Southern Oscillation (ENSO) event of 1997-1998, the US purse seine fleet's fishing effort was concentrated in the west longitude areas (east of 180° longitude). By mid-1998 the ENSO event had weakened and the US purse seine fleet's operations shifted westward, concentrating around Kiribati, Tuvalu, the Gilbert Islands and Solomon Islands (Coan et al. 1999). In 1998, the reported purse seine catch from the EEZ around the PRIAs was approximately 10,300 mt, a significant reduction from the previous year. In 1998 purse seine operations in the PRIAs accounted for 6% of the total US purse seine catch in the Pacific.

Domestic purse seine vessels operating in the central and western Pacific, are not required to report catches made in the US EEZ. However, US purse seiners fishing, pursuant to the

Multilateral Purse Seine Treaty in the western Pacific voluntarily record all purse seine sets regardless of location using report forms provided under the Treaty on Fisheries (Burney 1998).

### Albacore Trollers

The South Pacific albacore troll fleet is generally a high seas fishery. Domestic albacore troll vessels are also significant contributors to the total Pacific-wide landings of tunas, billfish and other pelagic management unit species such as mahi mahi and ono. The South Pacific albacore troll fishery, which began in 1986, operates from December through early April, with 20-30 US vessels joining an international fleet (WPFMC 1995). This fishery operates on dense concentrations of albacore that form along the sub-tropical convergence zone that lies 35-47° S and 170-130° W. Vessels are generally 60-80 ft in length, operating with crews of 3-5, and capable of freezing 45-90 tons of fish.

This fishery normally does not occur within the Council's area of competence. Distant-water albacore trollers have off-loaded in Hawaii in some years (e.g., 1995). While a portion of the distant-water albacore troller did make port calls in Hawaii, almost no landings were recorded for this fishery in Hawaii for 1997.

Under the High Seas Compliance Act (HSCA), the US albacore troll fleet is required to obtain a HSCA permit and submit logbooks to the NMFS Southwest Fisheries Science Center in La Jolla, California.

#### **4.2.2 Effort levels**

Between 1991 and 1997, the level of longline fishing effort in the EEZ waters surrounding Palmyra and Kingman Reef remained relatively constant. 1998 saw a dramatic increase in the number of longline vessels operating in the waters surrounding Kingman Reef and Palmyra Atoll. The level of fishing effort in this area accounted for approximately 20% of all longline caught fish landed in Hawaii in 1998. The abundance of bigeye tuna appears to have driven the expansion of the fishery effort in this area.

In 1998, two Hawaii-based troll and handline vessels, and one demersal longline vessel, targeting sharks, fished in the EEZ around Palmyra and Kingman Reef for PMUS. These vessels targeted both pelagic and bottomfish species, including yellowfin and bigeye tuna, wahoo, mahimahi, deep slope snappers and sharks.

The US purse seine fleet does operate inside the EEZ surrounding Palmyra, Howland, Baker, and Jarvis (WPFMC, 1998). In 1997, US purse seiners landed approximately 36,971 metric tons of tuna caught in the EEZ of the PRIAs (Clarke 1999).

## **5.0 Other applicable laws**

### **5.1 National Environmental Policy Act**

This document has been prepared to meet the requirements of the National Environmental Policy Act. Relevant sections of the amendment are incorporated into this EA by reference.

#### **5.1.1 Conclusions and determination**

- 1) The regulatory amendment will have no adverse impact on the long-term productivity of the domestic and high-seas pelagic stocks and will ensure the long-term productivity of managed species in the EEZ of the PRIAs.
- 2) The management action will have no adverse impact on ocean and coastal habitats. As stated, due to their remoteness, the marine environment of the PRIAs is in a relatively pristine state. The reefs and lagoons of these island areas support a diverse assemblage of nearshore fish as well as commercially important species such as tuna, snappers, jacks, and groupers. Sharks, particularly the gray reef shark are reported to be abundant. The coral reef habitat surrounding these islands are reportedly healthy and vibrant. The pelagic management unit species are distributed in the surface layer of the Pacific Ocean generally far removed from coastal habitats. Habitat conditions of the EEZ of the Western Pacific Region are relatively pristine. The proposed action will not affect the quality of this habitat.
- 3) The management action is not expected to have an adverse impact on public health or safety.
- 4) The management action will not directly affect any endangered or threatened species or a marine mammal population.
- 5) The management action will not result in cumulative, long-term, adverse impacts that could substantially affect target resource species or related stocks. An evaluation of the biological effects of the action will be made each year as part of the annual status report prepared by the Council for the pelagic fisheries managed in the Western Pacific Region (Section 2.6.2.1.1 of this document).
- 6) The management action is not expected to generate controversy in terms of whether or not it will significantly affect the quality of the human environment.
- 7) The management action will not have any effect upon flood plains or wetlands, nor upon any trails and rivers listed, or eligible for listing, on the National Trails and Nationwide Inventory of Rivers.

Based on the information contained in the environmental assessment, and other sections of this document, I have determined that the proposed alternative would not significantly affect the quality of the human environment, and therefore, preparation of an environmental impact statement is not required under the National Environmental Policy Act or its implementing regulations. Therefore, a finding of no significant impact is appropriate.

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Penny Dalton

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Date

## **5.2 Paperwork Reduction Act (PRA)**

This regulatory amendment establishes permit and record-keeping/reporting requirements that are subject to the provisions of the PRA. The preferred alternative requires any person who fishes for pelagic management unit species (PMUS) using troll and or handline gear, or lands PMUS shoreward of the outer boundary of the EEZ around the PRIAs to have a valid permit issued by NMFS. The permit is an open access permit which is registered to the vessel owned by the permit holder; it must be on board the vessel while using troll/handline gear to harvest PMUS from federal waters around the PRIAs.

The information collected under the permit application process is used to identify actual or potential participants in the fishery and help measure the impacts of the management program of the FMP. It is anticipated that five to seven permits would be issued initially, with the subsequent issuance of 1 or 2 permits annually. The annual information collection burden is estimated at 2.5 hours derived by multiplying the number of respondents each year times the amount of time needed to complete and submit a permit application form to NMFS, including the time needed to compile the necessary information for the application. This collection will be added to the currently approved Southwest Region Permit Family of Forms OMB No. 0648-0204).

Record-keeping and reporting requirements are also established by the regulatory amendment intended to obtain information on actual fishing activities from participants engage in the PRIA pelagic troll/handline fishery, with the exception of the charter fishery at the National Wildlife Sanctuary located in the Northwestern Hawaiian Islands. Careful consideration has been given to minimizing to the extent practicable any additional burden on the fishermen and to avoiding unnecessary duplication of data collection activities. The total annual burden for this record-keeping and reporting requirements is estimated to be 9 hours (2 vessels x 50 reports/vessel x 5.5 min/report). This collection will be added to the currently approved Southwest Region Logbook Family of Forms OMB No. 0648-0214.

While the estimated number of permits issued in the fishery is five (5), the number of respondents required to report under this regulatory amendment is less than the number of



permits issued because the charter fishing vessels operating at Midway National Wildlife Sanctuary currently submit daily boat trip logs to the U.S. Fish and Wildlife Service. A cooperative data sharing arrangement between the Council, NMFS, and the U.S. Fish and Wildlife Service is expected to be established concurrently with implementation of the logbook reporting requirement for the other PRIAs.

### **5.3 Coastal Zone Management Act**

Section 307(c)(1) of the Coastal Zone Management Act of 1972 requires all Federal activities which directly affect the coastal zone be consistent with approved state coastal zone management programs to the maximum extent practicable. The proposed regulatory adjustments to the Fishery Management Plan for the Pelagic Fisheries of the Western Pacific Region will not affect Hawaii's Coastal Zone Management (CZM) area or resources and therefore is consistent with Hawaii's CZM Program.

### **5.4 Endangered Species Act**

The rule will not have any effect on any listed endangered or threatened species, or habitat of those species. The action will help ensure that fishery interactions with protected species including seabirds and sea turtles are documented.

### **5.5 Marine Mammal Protection Act**

All fisheries in the Western Pacific Region are designated as Category 3, meaning that fishermen must report interactions with marine mammals, but they are not required to obtain exemption certificates in order to fish. This rule does not require a MMPA category redesignation for the pelagics fishery off the PRIAS.

### **5.6 Essential Fish Habitat**

The proposed action will not have an adverse impact on essential fish habitat (EFH) as designated under the Fisheries Management Plan for Pelagic Fisheries of the Western Pacific Region, the Fishery Management Plan for Bottomfish and Seamount Groundfish Fisheries of the Western Pacific Region, the Fishery Management Plan for Precious Coral Fisheries of the Western Pacific Region and the Fishery Management Plan for Crustaceans Fisheries of the Western Pacific Region.

## 6.0 References

- Burney D. United States Tuna Foundation, personal communication. 1998
- Clarke, R National Marine Fisheries Service, personal communication, 1999.
- Coan AL Jr., Sakagawa GT and Prescott D. 1997. U.S. commercial fisheries for tunas and billfish in the central-western Pacific, 1992-1996. Southwest Fisheries Science Center. 10<sup>th</sup> Standing Committee on Tuna and Billfish, 16-18 June 1997, Nadi, Fiji, 5 pp.
- Coan AL Jr., Williams P, Yamsaki G. 1999. The 1998 U.S. tropical tuna purse seine fishery in the central-western Pacific Ocean. South Pacific Commission, Annual meeting of parties to the South Pacific Regional Tuna Treaty, 24-30 March 1999, Koror, Republic of Palau.
- Cousins K and Cooper J, editors. Proceedings of a conference on the population biology of the Black-footed albatross in relation to mortality caused by longline fishing. 1999 October 8-10; Honolulu, Hawaii. Western Pacific Fishery Management Council.
- Gales R. 1998. Albatross populations: status and threats. Pages 20-45 *in* G Robertson and R Gales, editors. Albatross: Biology and Conservation
- Itano DG. 1998. Hawaii Tuna Tagging Project, Trip Report 03.
- Lehodey, P., Bertignac, M., Hampton, J., Lewis, A. and J. Picaut, 1997. ENSO and tuna in the Western Pacific. *Nature* 389, 715-717.
- Shallenberger R. United States Fish and Wildlife Service, personal communication. 1999
- Smith MK. 1993. An Ecological Perspective on Inshore Fisheries in the Main Hawaiian Islands . *Marine Fisheries Review* 55(2):34-49.
- SPC (South Pacific Commission), 1997. Status of tuna stocks in the Western and Central Pacific Ocean. South Pacific Commission, 10<sup>th</sup> Standing Committee on Tuna and Billfish, 16-18 June 1997, Nadi, Fiji, 38 pp.
- WPFMC (Western Pacific Fishery Management Council), 1995. Pacific profiles: pelagic fishing methods in the Pacific. Western Pacific Fishery Management Council, Honolulu.
- WPFMC (Western Pacific Fishery Management Council), 1998. Pelagic Fisheries of the Western Pacific Region: 1997 Annual Report. Western Pacific Fishery Management Council, Honolulu.

## 7.0 Draft Regulations

1. The authority citation for part 660 continues to read as follows:

Authority: 16 U.S.C. 1801 et seq.

- (b) In §660.12, the definition for “Handline”, PRIA (Pacific Remote Island Areas) or U.S. island possessions in the Pacific Ocean”, “PRIA pelagic fishing permit”, “Rod and reel”, and “Rod and reel or handline fishing vessel” are added in alphabetical order to read as follows:

### § 660.12 Definitions.

\* \* \* \* \*

Handline means fishing gear that is set and pulled by hand and consists of one line to which may be attached leader lines with hooks (includes trolling method).

\* \* \* \* \*

Rod and reel means a hand-held (including rod holder) fishing rod with a manually or electrically operated reel attached.

PRIA pelagic fishing permit means the permit required by §660.21 to use a vessel to fish for Pacific pelagic management unit species in the EEZ, or to land Pacific pelagic management unit species shoreward of the outer boundary of the EEZ, around the U.S. island possessions in the Pacific Ocean.

Rod and reel or handline fishing vessel means a vessel that has rod and reel and/or handline on board the vessel.

\* \* \* \* \*

PRIA (Pacific Remote Island Area) or U.S. island possessions in the Pacific Ocean means Palmyra Atoll; Kingman Reef; Jarvis, Baker, and Howland Island; Johnston Atoll; Wake Island and Midway Atoll.

\* \* \* \* \*

- (c) In § 660.14, paragraph (a) is revised, new paragraphs (a)(1), (a)(2), and (a)(3) are added to read as follows:

### § 660.14 Reporting and recordkeeping.

(a) Fishing record forms. The operator of any fishing vessel subject to the requirements of §§ 660.21, 660.41, or 660.81 must maintain on board the vessel an accurate and complete record of catch, effort, and other data on report forms provided by the Regional Administrator. All information specified on the forms must be recorded on the forms within 24 hours after the completion of each fishing day. The original logbook form for each day of the fishing trip must be submitted to the Regional Administrator in a manner set by this paragraph. Each form must be signed and dated by the fishing vessel operator.

(1) The operator of any vessel permitted with Hawaii longline limited access or a longline general permit must submit the original logbook form for each day of fishing trip to the Regional Administrator within 72 hours of each landing of management unit species.

(2) The operator of any vessel permitted with a PRIA pelagic fishing permit must submit the original logbook form for each day of fishing to the Regional Administrator within 30 days of each landing of management unit species.

\* \* \* \* \*

(d) In § 660.21, paragraphs (d) through (k) are redesignated as (e) through (l) and new paragraphs (d), (d)(1), and (d)(2) are added to read as follows:

§ 660.21 Permits.

\* \* \* \* \*

(d) A fishing vessel of the United States must be registered for use under a PRIA pelagic fishing permit if that vessel is used:

(1) To fish for Pacific pelagic management unit species using rod and reel or handline gear in the EEZ around the U.S. island possessions in the Pacific Ocean; or

(2) To land or transship, shoreward of the outer boundary of the EEZ around the U.S. island possessions in the Pacific Ocean, Pacific pelagic management unit species that were harvested with rod and reel or handline gear.

5. In § 660.22, "U.S. possessions in the Pacific Ocean area" is replaced by "U.S. island possessions in the Pacific Ocean", paragraph (i) is revised, paragraphs (j) through (q) and (r) through (y) are redesignated as (k) through (r) and (t) through (a2), and new paragraphs (j) and (s) are added to read as follows:

§ 660.22 Prohibitions.

\* \* \* \* \*

(i) Fish with longline gear within a longline fishing prohibited area, except as allowed pursuant to an exemption issued under § 660.17 or § 660.27.

(j) Use a rod and reel or handline vessel without a valid PRIA pelagic fishing permit registered for use with that vessel to fish for Pacific pelagic management unit species in the EEZ around the U.S. island possessions in the Pacific Ocean.

\* \* \* \* \*

(s) Use a U.S. vessel that has rod and reel or handline gear on board and that does not have a valid PRIA pelagic fishing permit registered for use with that vessel to land Pacific pelagic management unit species shoreward of the outer boundary of the EEZ around the U.S. island possessions in the Pacific Ocean;

\* \* \* \* \*