FISHERY ECOSYSTEM PLAN
for the
PACIFIC REMOTE ISLANDS AREA

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PREFACE

In 2005, the Council recommended to establish and implement fishery ecosystem plans for archipelagic, pelagic, and remote island areas in the Western Pacific Region. Previously, the Council managed fisheries in these areas using the single-species management paradigm. Ecosystem-based fishery management (EBFM) addresses a geographically-specified system of fishery-associated organisms (including humans), and the environment and the processes that control its dynamics. It includes noncommercial and commercial fisheries, and recognizes the physical, biological, economic and social interactions among the affected components of the ecosystem. Perhaps most importantly, EBFM seeks to manage for a spectrum of goals society has for fishery ecosystems – some of which may be in competition.

The Council's first fishery ecosystem plans were approved by the Secretary of Commerce in September 2009. However, considering ecosystem-based fishery management has an extended history in our region. For example, the Council's Executive Director, Kitty Simonds, was an active participant in one of the National Oceanic and Atmospheric Administration NOAA's first ecosystem management workshops, in 1986. In 2001, the Council took final action to recommend the first fishery ecosystem management plan in the nation. The Coral Reef Ecosystem Fishery Management Plan covered coral reef fishery ecosystems in the U.S. Pacific Islands. Among other things, the plan established a process to assess and control ecosystem effects of bottomfish, precious coral, and crustacean fisheries operating federal waters under then-existing fishery management.

The Pacific Remote Island Area Fishery Ecosystem Plan (FEP) is the framework under which the Council will manage place-based fishery ecosystem resources, including the integration of important ecosystem elements important to decision-making. These elements include social, cultural, and economic dimensions, protected species, habitat considerations, climate change effects, and the implications to fisheries from various spatial uses of the marine environment. Successful ecosystem-based fisheries management requires an increased understanding of a range of social and scientific issues, including the societal goals society appropriate management objectives, biological and trophic relationships, ecosystem indicators and models, and the ecological effects of non-fishing activities on the marine environment. Future fishery management actions are anticipated to utilize this information as it becomes available, and adaptive management will be used to further advance the implementation of ecosystem science and principles. In this regard, the success of the EBFM approach relies heavily on the data collection and synthesis process established by the pelagic and archipelago annual fishery ecosystem reports (SAFE Reports). In 2015, the Council, in partnership with the National Marine Fisheries (NMFS) Pacific Islands Fishery Science Center, local fishery resource management agencies, and the NMFS Pacific Islands Regional Office revised and expanded the contents of these reports to include the range of ecosystem elements described above.

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EXECUTIVE SUMMARY

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) is the primary domestic legislation governing management of the nation's marine fisheries. The United States Congress has amended and reauthorized the MSA several times since 1976. The 1996 reauthorization included, among other things, a new emphasis on the precautionary approach. In 2006, an annual catch limit requirement was written in. The MSA contains ten national standards, with which all fishery management plans and plan amendments must conform. The MSA also requires U.S. fisheries management be consistent with the requirements of other regulations including the National Environmental Policy Act, Marine Mammal Protection Act, the Endangered Species Act, the Migratory Bird Treaty Act, and several other Federal laws and Executive Orders.

Under the Magnuson-Stevens Act, the Western Pacific Regional Fishery Management Council (Council) is authorized to prepare and submit to the Secretary of Commerce for approval, disapproval or partial approval, a Fishery Management Plan (FMP) and any necessary amendments, for fisheries that are under its authority and that require conservation and management. The Council transitioned to Fishery Ecosystem Plans (FEPs) from FMPs in 2009. The Council process includes many opportunities for public involvement in the development of FEPs and amendments.

This Fishery Ecosystem Plan (FEP) governs federal fisheries of the Pacific Remote Islands Area, which are comprised of Baker, Howland, Jarvis, Wake, Islands, Johnston and Palmyra Atolls, and Kingman Reef. The management area is the United States (U.S.) Exclusive Economic Zone (EEZ). The Plan covers bottomfish, coral reef fish, crustacean, and precious corals stocks and fisheries. The FEP was implemented on September 24, 2009. It replaced a set of species-based FMPs that covered the Western Pacific Region. This version of the FEP was implemented on ____. It strengthens the ecosystem-based fishery management approach, provides the public with additional information regarding the management process, conforms to new information requirements, and is a framework for a clearer understanding of fishery and conservation and management measures promulgated by the FEP and subsequent amendments to it.

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1 INTRODUCTION

1.1 Mission

The Western Pacific Regional Fishery Management Council (Council) is a federal instrumentality established and authorized by Congress in 1976. Its mission is to "plan, coordinate and realize all responsibilities as delegated under the MSA for effective conservation and prudent development of the region's fishery resources for the benefit of the region and the nation." To meet this mission, the Council established the following Guiding Principles:

1. Support quality research and obtain the most complete scientific information available to assess and manage fisheries;
2. Promote an ecosystem approach in fisheries management, including reducing waste in fisheries and minimizing impacts on marine habitat and impacts on protected species;
3. Conduct education and outreach to foster good stewardship principles and broad and direct public participation in the Council's decision making process;
4. Recognize the importance of island cultures and traditional fishing practices in managing fishery resources and foster opportunities for participation;
5. Promote environmentally responsible fishing and the utilization of sustainable fisheries that provide long term economic growth and stability;
6. Promote regional cooperation to manage domestic and international fisheries; and
7. Encourage development of technologies and methods to achieve the most effective level of monitoring, control and surveillance and to ensure safety at sea.

The Council is responsible for developing fishery management policies for the western Pacific region, which includes the State of Hawaii, Territories of American Samoa and Guam, the Commonwealth of the Northern Mariana Islands and U.S. Pacific Remote Island Areas (Figure 1). All management plans, amendments to them, and regulations implementing them, must comply with the MSA and all other applicable laws – such as the National Environmental Policy Act (NEPA). The Council's primary responsibility is to develop and recommend fishery management measures for any federally managed fishery, stock, or stock complex, as well as measures to protect important ecosystem components, such as protected species and fish habitat.

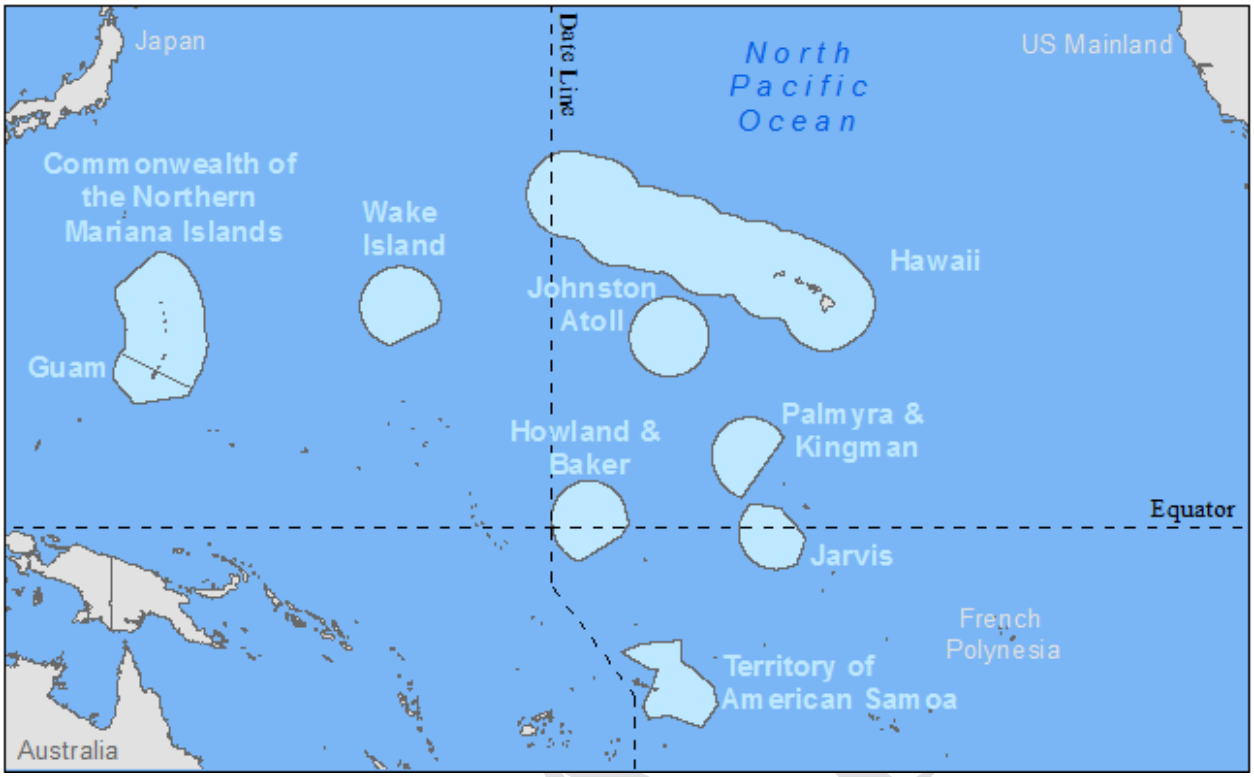

Figure 1. Western Pacific Region

Our region's archipelagos have distinct cultures, communities, and marine resources. For thousands of years, the indigenous people of these islands relied on healthy marine ecosystems to sustain themselves, their families, and their island communities. Although the past century has brought enormous advancements in transportation and diet, these islanders continue to depend on healthy marine ecosystems, owing to the remoteness of the islands, and their intact cultural practices. Even in the modern period, much ecological, economic, and social benefit is realized from sustainably managing island resources.

1.2 Authorities and Primary Management and Process Drivers

1.2.1 Magnuson-Stevens Fisheries Conservation and Management Act

In 1976, the United States Congress passed the Fishery Conservation and Management Act to promote domestic fisheries and establish management authority over fishery and related resources within the 200 mile federal Exclusive Economic Zone (EEZ). The statute has been subsequently amended and reauthorized over the ensuing years and is now known as the Magnuson-Stevens Fishery Conservation and Management Act (MSA).[1] It is the primary law governing federal management of United States fisheries.

[1] The Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended through 2006, is available at: http://www.nmfs.noaa.gov/sfa/magact/MSA_Amended_2007%20.pdf

Under the MSA, the United States (U.S.) has exclusive fishery management authority over all fishery resources found within its EEZ. For purposes of the MSA, the inner boundary of the U.S. EEZ extends from the seaward boundary of each coastal state to a distance of 200 nautical miles from the baseline from which the breadth of the territorial sea is measured. In the Pacific Remote Island Area (PRIA), the Western Pacific Regional Fishery Management Council (Council) has authority over the fisheries based in, and surrounding, Johnston Atoll, Wake Island, Howland and Baker Island, Palmyra Atoll and Kingman Reef, and Jarvis Island.

The management system created by the MSA is unique in U.S. natural resource management. In order to avoid top-down, centralized fishery resource management, Congress established eight regional fishery management councils and provided them with responsibility for developing fishery management plans and recommending amendments to those plans on an ongoing basis, as well as regulatory language for implementation. As such, the Councils have a unique relationship with their primary partner federal agency, the National Marine Fisheries Service (NMFS). Councils are composed of federal, state, and territorial fishery management officials, participants in commercial and recreational fisheries, and other individuals with experience, scientific expertise, or training that give them knowledge about fishery conservation and management or commercial or recreational harvest. In addition, the MSA mandates certain advisory bodies (and authorized the Councils to create others) so as to provide the Councils with technical advice and guidance in fishery policy decision making. The MSA mandates an open, public process for the development of fishery management measures and actions through the Council system.

As in other regions, responsibility for the management of marine resources in the Western Pacific is shared by a number of federal and local government agencies. At the federal level are the Council, the NMFS (also known as the NOAA Fisheries Service), the National Oceanic and Atmospheric Administration (NOAA), and the U.S. Fish and Wildlife Service (USFWS; U.S. Department of the Interior). The U.S. Department of Homeland Security, through the Coast Guard, and U.S. Department of Defense, through the Air Force, Army, Navy and Marine Corps, also control access, enforcement, and use of various marine waters throughout the region.

Sixteen members of the Council include the following:

- Regional Administrator, Pacific Islands Regional Office, National Marine Fisheries Service
- Director, Department of Marine and Wildlife Resources, Territory of American Samoa
- Secretary, Department of Land and Natural Resources, Commonwealth of the Northern Mariana Islands
- Director, Department of Agriculture, Territory of Guam
- Chair, Department of Land and Natural Resources, State of Hawaii
- One obligatory member from each of the four island areas nominated by their respected governors and appointed by the Secretary of Commerce
- Four at-large members nominated by the region's Governors and appointed by the Secretary of Commerce.
- District Commander, US Coast Guard 14th District (non-voting member)
- Director, Office of Marine Conservation, US State Department (non-voting member)

- Director, US Fish and Wildlife Service (non-voting member)

The basic functions of the Council as required by the MSA are diverse. For fisheries under its authority that require conservation and management the Council has the following responsibilities:

1. Prepare and transmit to the Secretary fishery ecosystem plans (FEPs) and amendments to such plans as necessary to address changing needs in conservation and management;
2. Prepare comments on any application for foreign fishing transmitted to the Council, and any fishery management plan or amendment transmitted to the Council;
3. Conduct public scoping, meetings and hearings at appropriate times and in appropriate locations in its geographic area[2] so as to allow all interested persons an opportunity to be heard in the development of FEPs and amendments to such plans, and other matters with respect to the administration and implementation of the provisions of the Magnuson-Stevens Act and other Statutory requirements;
4. Submit to the Secretary such periodic reports as the Council deems appropriate and any other relevant report that may be requested by the Secretary;
5. Review on a continuing basis, and revise as appropriate, the following for each fishery within its geographical area of authority: assessments and related specifications with respect to the optimum yield (OY); the capacity and extent to which US fish processors will process US harvested fish; and the total allowable level of foreign fishing;
6. Develop annual catch limits (ACLs) for managed fisheries that may not exceed the fishing level recommendations of its Scientific and Statistical Committee (SSC) or similar peer-review process;
7. Develop, in conjunction with its SSC, five-year research priorities for fisheries, fisheries interactions, habitats and other areas of research that are necessary for management purposes; update them as necessary; and submit them to the Secretary of Commerce (Secretary) and the Pacific Islands Fisheries Science Center (PIFSC) of the National Marine Fisheries Service (NMFS) for their consideration in developing research priorities and budgets for the Pacific Islands/Western Pacific Region;
8. May review and provide comment on any federal or state action that may affect fishery habitat under the Council's jurisdiction; and
9. Conduct any other activities that are required by, or provided for in, the MSA or which are necessary and appropriate to the foregoing functions.

[2] "Geographic area" may include an area under the authority of another Council if the fish in the fishery concerned migrate into, or occur in, that area or if the matters being heard affect fishermen of that area.

1.2.1.1 National Standards

To carry out the above functions, the Council pays particular attention to 10 National Standards (NS) described in the MSA, against which the Council's recommendations to the Secretary are measured:

1. Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the OY from each fishery for the United States fishing industry.
2. Conservation and management measures shall be based upon the best scientific information available.
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.
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 fair and equitable to all such fishermen; reasonably calculated to promote conservation; and carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.
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.
6. Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources and catches.
7. Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.
8. Conservation and management measures shall, consistent with the conservation requirements of the MSA (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities by utilizing economic and social data that meet the requirements of NS 2 in order to provide for the sustained participation of such communities, and, to the extent practicable, minimize adverse economic impacts on such communities.
9. Conservation and management measures shall, to the extent practicable, minimize bycatch and, to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.
10. Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.

1.2.1.2 Essential Fish Habitat

In 1996, Congress passed the Sustainable Fisheries Act, which amended the MSA and added several new FMP provisions. From an ecosystem management perspective, the identification and description of essential fish habitat (EFH) for all federally managed species were among the most important of these additions.

According to the MSA, EFH is defined as "those waters and substrate necessary to fish for spawning, breeding or growth to maturity." This new mandate represented a significant shift in fishery management. Because the provision required councils to consider a MUS's ecological role and habitat requirements in managing fisheries, it allowed Councils to move beyond the traditional single-species or multispecies management to a broader ecosystem-based approach. In 1999, NMFS issued guidelines intended to assist Councils in implementing the EFH provision of the MSA, and set forth the following four broad tasks:

1. Identify and describe EFH for all species managed under an FMP.
2. Describe adverse impacts to EFH from fishing activities.
3. Describe adverse impacts to EFH from non-fishing activities.
4. Recommend conservation and enhancement measures to minimize and mitigate the adverse impacts to EFH resulting from fishing and non–fishing related activities.

The guidelines recommended that each Council prepare a preliminary inventory of available environmental and fisheries information on each managed species. Such an inventory is useful in describing and identifying EFH, as it also helps to identify missing information about the habitat utilization patterns of particular species. The guidelines note that a wide range of basic information is needed to identify EFH. This includes data on current and historic stock size, the geographic range of the managed species, the habitat requirements by life history stage, and the distribution and characteristics of those habitats. Because EFH has to be identified for each major life history stage, information about a species' distribution, density, growth, mortality, and production within all of the habitats it occupies, or formerly occupied, is also necessary.

The guidelines also state that the quality of available data used to identify EFH should be rated using the following four-level system:

Level 1:	All that is known is where a species occurs based on distribution data for all or part of the geographic range of the species.
Level 2:	Data on habitat-related densities or relative abundance of the species are available.
Level 3:	Data on growth, reproduction, or survival rates within habitats are available.
Level 4:	Production rates by habitat are available.

With higher quality data, those habitats most utilized by a species could be identified, allowing a more precise designation of EFH. Habitats of lesser value to a species may also be essential, depending on the health of the fish population and the ecosystem. For example, if a species is overfished, and habitat loss or degradation is thought to contribute to its overfished condition, all habitats currently used by the species may be essential.

The EFH provisions are especially important because of the procedural requirements they impose on both Councils and federal agencies. First, for each FMP, Councils must identify adverse impacts to EFH resulting from both fishing and non-fishing activities, and describe measures to minimize these impacts. Under § 305(b)(2) of the MSA, federal agencies are required to consult with NMFS on any action authorized, funded, or undertaken by the agency

that may adversely affect EFH identified by the Council. Councils are not required to provide conservation and enhancement recommendations except for anadromous species. In 2002, NMFS revised the guidelines by providing additional clarifications and guidance to ease implementation of the EFH provisions by Councils.

Based on the best available information on habitats in waters of the PRIA and the existing fisheries, the Council has determined that the fisheries operating in the PRIAs are not expected to have adverse impacts on EFH or Habitat Areas of Particular Concern (HAPC; a subset of EFH) for managed species. Continued and future operations of fisheries under the PRIA FEP 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 description and identification of EFH and HAPC for fisheries managed under this FEP can be found in section 3, Management Regime. Information related to activities that may adversely affect EFH and EFH maps can be found in Appendices G and H. Life history and habitat information on managed species, on which the EFH descriptions are based, may be found in the EFH Source Document available on the Council's web site (www.wpcouncil.org). The most up-to-date EFH maps are also available on the Council web site.

1.2.2 National Marine Fisheries Service Guidance

Primary authority for implementing and enforcing management action developed under the MSA rests with the U.S. Secretary of Commerce (Secretary), who has delegated this responsibility to NMFS. The NMFS develops guidance to aid the Councils, fishermen and others to develop, implement and comply with fishery regulations. In addition, the Council and NMFS have established operating agreements to help define specific roles and responsibilities for developing, approving, and implementing fishery management plans and other actions under the auspices of the MSA. Such guidance documents and agreements include, but are not limited to, *Operational Guidelines for Fishery Management Process* and *Regional Operating Agreements*.

1.2.3 The National Environmental Policy Act

The National Environmental Policy Act (NEPA) requires federal agencies to assess and consider the effects of major federal actions on the quality of the human environment by considering the environmental impacts of proposed actions and reasonable alternatives to those actions. The Act also requires that the public be provided the opportunity to help identify, review and comment on such effects, particularly in cases where an environmental impact statement (EIS) is being prepared.

NEPA requires an environmental impact statement (EIS) for major federal actions that significantly affect the quality of the human environment. Agencies may conduct an environmental assessment to determine whether an EIS is necessary or whether a Finding of No Significant Impact (FONSI) or a Categorical Exclusion (CE) is warranted.

At the time of the final decision (and in the case of an EIS, at least 30 days after the Final EIS is noticed and at least 90 days after the Draft EIS is noticed), agencies must have prepared a record of decision (ROD), FONSI, or determined that a CE applies. It is important to be aware of the interaction of NEPA and MSA timing requirements. For example, the deadline for the Secretary

to approve, disapprove, or partially approve a Council-submitted FMP or Amendment (i.e., 30 days after the close of the comment period on the FMP or Amendment and often referred to as "Day 95") should not occur prior to signing the ROD or the FONSI. If it is an FEIS, the ROD may not be signed sooner than 30 days after noticing the availability of the FEIS.

1.2.4 Endangered Species Act

The Endangered Species Act (ESA) provides for the conservation of species that are endangered or threatened, and the conservation of the ecosystems on which they depend. Section 7(a)(2) of the ESA requires each federal agency to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. To "jeopardize" means to reduce appreciably the likelihood of survival and recovery of a species in the wild by reducing its numbers, reproduction, or distribution. As described in the NMFS policy for Integration of Endangered Species Act Section 7 with the Magnuson-Stevens Act Processes (PD 01-117), the Council plays an integral role in these consultations.

When a federal agency's action "may affect" an ESA-listed species, that agency is required to consult formally with NMFS (for marine species, some anadromous species, and their designated critical habitats) or the USFWS (for terrestrial and freshwater species or their designated critical habitat). The product of formal consultation is the agency's biological opinion (BiOp). Federal agencies are exempt from this formal consultation requirement if they have concluded that an action "may affect, but is not likely to adversely affect" ESA-listed species or their designated critical habitat, and NMFS or USFWS concur with that conclusion (see 50 CFR § 402.14(b)).

The ESA also prohibits the taking[3] of listed species except under limited circumstances. Western Pacific regional fisheries are operated in accordance with terms of ESA consultations that consider the potential interactions of fisheries with listed species, the impacts of interactions on the survival and recovery of listed species, and the protection of any designated critical habitat.

As provided in 50 CFR § 402.16, NMFS is required to reinitiate formal consultation if:

(1) the amount or extent of the incidental take is exceeded;
(2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in an opinion;
(3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in the opinion; or
(4) a new species is listed or critical habitat designated that may be affected by the action.

A current list of ESA listed species applicable to the Pacific Remote Islands Area FEP is included in the Annual Fishery Ecosystem Report (SAFE Report) and additional information regarding protected species interactions in this FEP is included in Section 3.2 (Other Considerations Important for Implementation – Protected Species Information).

[3] The definition of "take" includes to harass, harm, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct.

1.2.5 Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA) prohibits, with certain exceptions, the take of marine mammals in the U.S. EEZ and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the United States. The MMPA gives the Secretary authority and duties for the protection and conservation of all cetaceans (whales, dolphins, and porpoises) and pinnipeds (seals and sea lions, except walruses). The MMPA requires NMFS to prepare and periodically review marine mammal stock assessments (see 16 U.S.C. § 1361, *et seq*.).

Pursuant to the MMPA, NMFS has promulgated specific regulations that govern the incidental take of marine mammals during fishing operations (50 CFR 229). Under section 118 of the MMPA, NMFS must publish, at least annually, a List of Fisheries that classifies U.S. commercial fisheries into three categories, based on relative frequency of incidental mortality and serious injury to marine mammals in each fishery:

- Category I designates fisheries with frequent serious injuries and mortalities incidental to commercial fishing. Annual mortality and serious injury of a stock in a given fishery is by itself responsible for the annual removal of greater than or equal to 50 percent or more of any stock's potential biological removal (PBR) level.

- Category II designates fisheries with occasional serious injuries and mortalities incidental to commercial fishing. Annual mortality and serious injury of a stock in a given fishery is, collectively with other fisheries, responsible for the annual removal of greater than 10 percent of any stock's PBR level, and is by itself responsible for the annual removal of between 1 and less than 50 percent, exclusive, of any stock's PBR level.

- Category III designates fisheries with a remote likelihood or no known serious injuries or mortalities. A Category III fishery is, collectively with other fisheries, responsible for the annual removal of 10 percent or less of any stock's PBR level; or collectively with other fisheries, more than 10 percent of any stock's PBR level, but is by itself responsible for the annual removal of 1 percent or less of PBR level.

Owners of vessels or gear engaging in a Category I or II fishery are required under 50 CFR 229.4 to obtain a marine mammal authorization to lawfully incidentally take non-ESA listed marine mammals by registering with NMFS' marine mammal authorization program. Fishermen participating in Category I or II fisheries are also required to accommodate an observer onboard upon request by NMFS, and are required to comply with any applicable take reduction plans. Current List of Fisheries classifications for fisheries operating under the Pacific Remote Islands Area FEP are included in the Annual Pelagic Fishery Ecosystem Report (SAFE Report).

Section 101 (a)(5)(E) of the MMPA requires the Secretary of Commerce to allow the incidental, but not intentional, taking of individuals from marine mammal stocks that are designated as depleted because of listing as threatened or endangered under the ESA in the course of commercial fishing operations if it is determined that three criteria are met:

1. Incidental mortality and serious injury will have a negligible impact on the affected species or stock;

2. A recovery plan has been developed or is being developed; and
3. Where required under section 118 of the MMPA, a monitoring program has been established, vessels engaged in such fisheries are registered in accordance with section 118 of the MMPA, and a take reduction plan (TRP) has been developed or is being developed for such species or stock.

1.3 Pacific Remote Islands Area

The Pacific Remote Island Areas comprise the U.S. possessions of Baker Island, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Wake Island, Palmyra Atoll, and Midway Atoll (Figure 2). However, because Midway is located in the Hawaiian archipelago, it is included in the Hawaii Archipelago FEP[4]. Therefore, neither the "Pacific Remote Island Areas" nor "PRIA" include Midway Atoll, for the purposed of federal fisheries management.

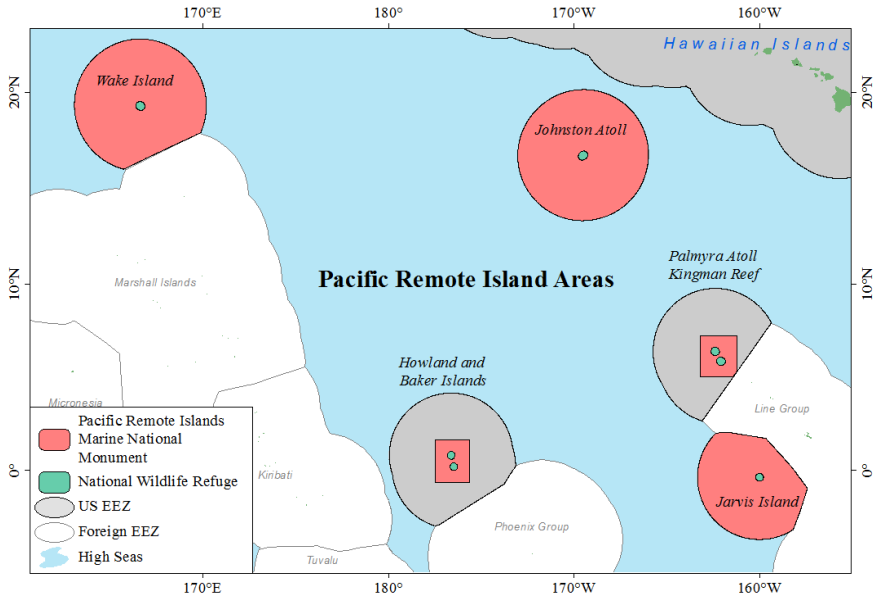

Figure 2. Pacific Remote Island Areas

1.3.1 Geography

Baker Island is part of the Phoenix Islands archipelago. It is located approximately 1,600 nautical miles to the southwest of Honolulu at 0° 13' N and 176° 38' W. Baker is a coral-topped seamount surrounded by a narrow-fringing reef that drops steeply very close to the shore. The total amount of emergent land area of Baker Island is 1.4 square kilometers.

Howland Island lies approximately 35 miles due north of Baker Island is also part of the Phoenix Islands archipelago. The island, which is the emergent top of a seamount, is fringed by a relatively flat coral reef that drops off sharply. Howland Island is approximately 1.5 miles long and 0.5 miles wide. The island is flat and supports some grasses and small shrubs. The total land area is 1.6 square kilometers.

[4] Midway is not administered civilly by the State of Hawaii.

Jarvis Island, which is part of the Line Island archipelago, is located approximately 1,300 miles south of Honolulu and 1,000 miles east of Baker Island. It sits 23 miles south of the Equator at 160° 01' W. Jarvis Island is a relatively flat, sandy coral island with a 15–20-ft beach rise. Its total land area is 4.5 square kilometers. It experiences a very dry climate.

Palmyra Atoll is a low-lying coral atoll system comprised of approximately 52 islets surrounding three central lagoons. It is approximately 1,050 nautical miles south of Honolulu and is located at 5° 53' N and 162° 05' W. It is situated about halfway between Hawaii and American Samoa. Palmyra Atoll is located in the intertropical convergence zone, an area of high rainfall.

Kingman Reef is located 33 nautical miles northwest of Palmyra Atoll at 6° 23' N and 162° 24' W. Along with Palmyra, it is at the northern end of the Line Island archipelago. Kingman is actually is a series of fringing reefs around a central lagoon with no emergent islets that support vegetation.

Wake Island is located at 19° 18' N and 166° 35' E, and is the northernmost atoll of the Marshall Islands group, located approximately 2,100 miles west of Hawaii. Wake Island has a total land area of 6.5 square kilometers and comprises three islets: Wake, Peale, and Wilkes.

Johnston Atoll is located at 16° 44' N and 169° 31' W and is approximately 720 nautical miles southwest of Honolulu. French Frigate Shoals in the NWHI, about 450 nautical miles to the northwest, is the nearest land mass. Johnston Atoll is an egg-shaped coral reef and lagoon complex comprised of four small islands totaling 2.8 square kilometers. The complex resides on a relatively flat, shallow platform approximately 34 kilometers in circumference. Johnston Island, the largest and main island, is natural, but has been enlarged by dredge and fill operations. Sand Island is composed of a naturally-formed island on its eastern portion and is connected by a narrow, man-made causeway to a dredged coral island at its western portion. The remaining two islands, North Island and East Island, are completely man-made from dredged coral.

1.3.2 History and Socio-Economic Considerations

The PRIA have a unique history and were important areas during World War II. The occupation and use of the PRIA after post-European contact, approximately AD 1800, can be divided into distinctive time periods or eras based upon alternating periods of occupation, use, and abandonment. The eras are categorized as whaling, guano mining, colonizing, military, and post-military.

From the 1930s to the early 1940s, native Hawaiian male students from Kamehameha School were stationed on Howland, Baker, and Jarvis Islands. The students established settlements on the islands for political purposes on behalf of the United States, which sought to prove permanent residency in order to claim the areas as US territories.

Johnston Atoll and Baker, Howland, and Jarvis Islands are currently uninhabited. Public entry to these areas requires a special-use permit and is generally restricted to scientists and educators.

The islands are visited periodically by the U.S. Fish and Wildlife Service and the United States Coast Guard.

Johnston Atoll, also known as Kalama Atoll to Native Hawaiians, is an unincorporated territory of the United States currently administered by the United States Department of the Interior via the U.S. Fish and Wildlife Service (USFWS) of the as part of the Pacific Remote Islands Marine National Monument. The islands are visited annually by the U.S. Fish and Wildlife Service. Public entry is only by special-use permit and generally restricted to scientists and educators. For nearly 70 years, the atoll was under the control of the American military. In that time it was used as a bird sanctuary, as a naval refueling depot, as an airbase, for nuclear and biological weapons testing, for space recovery, as a secret missile base, and as a chemical weapon and Agent Orange storage and disposal site. These activities left the area environmentally contaminated and remediation and monitoring continue. In 2004 the U.S. military base was closed and control was handed over to civilian authorities of the United States Government.

Baker Island is an unincorporated and unorganized territory of the United States and is currently administered by the United States Fish and Wildlife Service (USFWS) of the Department of the Interior as part of the Pacific Remote Islands Marine National Monument. The island is named for Captain Baker, which claimed the island. In 1855, Captain Baker sold his interest to a group who later formed the American Guano Company.

Artifacts found on Howland Island indicate early and sporadic Polynesian presence on the Island; however, its lack of consistent fresh water suggests that the island was not settled as a permanent Polynesian residence. Howland Island was periodically mined for guano from around 1850 to 1890. An airstrip was built on Howland Island by the Kamehameha students and was scheduled to be visited by Amelia Earhart in 1937. Radio transmissions of Earhart's plane were received on the island, but the plane was never seen. Howland Island is and unincorporated and unorganized territory of the United States and is currently administered by the USFWS of the Department of the Interior as part of the Pacific Remote Islands Marine National Monument.

Jarvis Island is also an unincorporated and unorganized territory of the United States and is currently administered by the USFWS as part of the Pacific Remote Islands Marine National Monument. Unlike most coral atolls, the lagoon on Jarvis is wholly dry. Jarvis was mined for guano from 1858 to 1879.

Indigenous Marshallese oral tradition suggests that before European exploration, Marshall Islanders called Wake Island, *Enen-kio*, after a small orange shrub-flower said to have been found on the atoll. The U.S. Navy received administrative control of Wake in 1934, and established an air base on the atoll in January 1941. Wake Island figured prominently in World War II, and the Japanese overtook U.S. forces on Wake in 1941. On September 4, 1945, the Japanese garrison surrendered to a detachment of United States Marines and the U.S. reoccupied the atoll after the war. The Federal Aviation Administration held administrative authority until 1962, when it was transferred to the Department of the Interior, which in turn assigned authority to the U.S. Air Force. Since 1994, the Department of the Army has maintained administrative use of Wake Island. A small cadre of military personnel and

contractors maintain a missile testing facility and other military uses and the area is closed to the public. Wake Island has an acting governor, Mr. Gordon Tanner, who is the chief legal officer of the US Department of the Air Force. The U.S. Fish and Wildlife Service also manages Wake Island as a National Wildlife Refuge. Fishing is allowed for people living on and visiting Wake.

Palmyra Atoll first became an American possession when it was claimed by the American Guano Company in 1859. In 1862, King Kamehameha IV claimed Palmyra for the Kingdom of Hawaii. In 1898, when the U.S. annexed the Territory of Hawaii, President McKinley also included Palmyra Atoll. In 1912, a judge from Honolulu bought all of Palmyra Atoll, which he later sold to the Fullard-Leo family. The U.S. Navy took control of Palmyra in 1940 and used it as a naval aviation facility. In 1947, the U.S. Supreme Court returned ownership of Palmyra to the Fullard-Leo family. In 1961, President Kennedy assigned civil administration over Palmyra to the U.S. Department of Interior. In 2000, the Nature Conservancy bought Palmyra Atoll from the Fullard-Leo family and, in July 2004, established the Palmyra Atoll Research Consortium (PARC). Palmyra Atoll is managed cooperatively by the USFWS and the Nature Conservancy, which owns Cooper Island, which it manages as a nature preserve with limited recreational fishing (e.g., flyfishing for bonefish). The USFWS administers the atoll as a National Wildlife Refuge.

1.3.2.1 Fishing Communities

The MSA defines a fishing community as a community which is substantially dependent on or substantially engaged in the harvest or processing of fishery resources to meet social and economic needs, and includes fishing vessel owners, operators, and crew and U.S. fish processors that are based in such community.

Island communities in the Western Pacific depend upon the surrounding ocean and its resources, which have provided residents with a source of food and opportunities for maritime commerce and recreation for millennia. Because participants in various fisheries in the Western Pacific are not concentrated in specific locales but rather reside in villages and small towns across the islands, and because fishing, seafood, and fishing-related businesses assume extensive social and economic importance throughout the region, the Council recommended in 1999 that the Secretary of Commerce designate American Samoa, Guam and the CNMI as fishing communities under the MSA[5]. The NMFS Pacific Islands Fisheries Science Center has since developed general profiles of these fishing communities. In 2002, the Council recommended in 2002 that the Secretary of Commerce designate each of the Main Hawaiian Islands as fishing communities under the MSA.

The social and economic interplay between island residents and the surrounding ocean environment is central to an understanding of community life in islands. Because most island areas the Council's jurisdiction are located some thousands of miles from the nearest continent and over 5,500 miles from North America, goods must be transshipped on or over thousands of

[5] Federal Register Vol. 64, No. 74 April 19, 1999, 19067

miles of ocean. This has led to a relatively high cost of living and limited availability of certain goods and services. The tourism economy is closely related to recreation and leisure opportunities along the coastal zone, and it too is conditioned by distance of travel to the islands. Fishing activities are important across the region, and living marine resources are used for commercial sale, household consumption, and as a source of recreation. Various aspects of local and indigenous history, culture, and society are closely related to the surrounding ocean and use of its resources.

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2 MANAGEMENT POLICY, GOALS, AND OBJECTIVES

2.1 Council Management Policy

The Council's management policy is to apply responsible and proactive management practices, based on sound scientific data and analysis and inclusive of fishing community members, to conserve and manage fisheries and their associated ecosystems of the Pacific Remote Islands Area.

2.2 Pacific Remote Islands Area FEP Purpose and Need

The Pacific Remote Islands Area contains various stocks and stock complexes that are found in federal waters and which provide important benefits to the Nation. Since these resources are in need of management, the Council is required under the MSA to develop management plans to accomplish this. In addition, the habitats for these fish, as well as other elements of the marine ecosystem, such as sea turtles, cetaceans, and corals, are also locally and nationally important. Since all of these are interconnected, the Council opted in the mid-2000s to take an archipelagic ecosystem-based approach to fisheries managed and spent the next several years revising its five species/complex-based fishery management plans (FMPs) to FEPs. The Council's Precious Corals FMP (1983), Crustaceans FMP (1983), Bottomfish and Seamount Groundfish (1986), Pelagics FMP (1987), and Coral Reef Ecosystems FMP (2001) were transitioned to the place-based five FEPs in 2009 that include the American Samoa Archipelago FEP, Mariana Islands Archipelago FEP, Hawaiian Archipelago FEP, Pacific Remote Island Area FEP, and Pacific Pelagic FEP.

The Council's decision to transition to ecosystem-based fishery management (EBFM) followed Congressional direction in 1996 to NMFS to establish an Ecosystem Principles Advisory Panel (Panel; EPAP). The Panel was tasked with assessing the extent to which ecosystem principles were being or could be used in fisheries management and recommending how to further the use of ecosystem principles to improve the status and management of marine resources. The Panel reached consensus that the Councils and NMFS should develop and implement Fishery Ecosystem Plans in order to manage U.S. fisheries and marine resources in a more comprehensive and integrated manner (NMFS 1999). The NMFS finalized an EBFM Policy Directive in 2016.

In 2009, President George W. Bush established the Pacific Remote Islands Marine National Monument (PRIMNM) by Presidential Proclamation 8336. In 2014, portions of the PRIMNM were expanded in 2014 by President Barak Obama. The Pacific Remote Islands Monument encompasses seven islands and atolls that make up the PRIA. To date, it is the largest marine protected area in the world, at 370,000 square nautical miles (1,269,065 square kilometers). The Monument is cooperatively managed by the Secretary of Commerce (NOAA) the Secretary of the Interior (USFWS), with the exception of Wake Island and Johnston Atoll which are currently managed by the Department of Defense. National Wildlife Refuges also exist at each of the islands within the Monument. Department of Defense activities are generally exempted from PRIMNM prohibitions.

The proclamations that established and expanded the PRIMNM state that applicable fishery

regulations are to be developed under the authority of the MSA and the Secretary of Commerce has approved Council recommended regulations under the PRIA FEP that apply within the PRIMNM (Appendix C). Commercial fishing is prohibited within all waters of the PRIMN.

2.3 Pacific Remote Islands Area Fishery Ecosystem Plan Goals

The Pacific Remote Islands Area FEP establishes a framework under which the Council can recommend management measures required by federal law and best available scientific information.

The National Oceanic and Atmospheric Administration (NOAA) defines an ecosystem approach as "management that is adaptive, specified geographically, takes account of ecosystem knowledge and uncertainties, considers multiple external influences, and strives to balance diverse social objectives." In addition, because of the wide-ranging nature of ecosystems, successful implementation of ecosystem approaches will need to be incremental and collaborative (NOAA 2004).

On international, national, and local levels, institutions and agencies tasked with managing marine resources are moving toward an ecosystem approach to fisheries management. One reason for this shift is a growing awareness that many of Earth's marine resources are stressed and the ecosystems that support them are degraded. In addition, increased concern regarding the potential impacts of fishing and non-fishing activities on the marine environment, and a greater understanding of the relationships between ecosystem changes and population dynamics, have all fostered support for a holistic approach to fisheries management that is science based and forward thinking (Pikitch et al. 2004).

In order to achieve EBFM, this plan: 1. identifies the management objectives of the Pacific Remote Islands Area FEP; 2. delineates the boundaries of the Pacific Remote Islands Area FEP; 3. designates the management unit species included in the Pacific Remote Islands Area FEP; 4. details the federal fishery regulations applicable under Pacific Remote Islands Area FEP; and 5. establishes appropriate Council structures and advisory bodies to provide scientific and management advice to the Council regarding the Pacific Remote Islands Area FEP. In addition, this plan provides the information and rationale for these measures; discusses the key components of the Pacific Remote Islands Area ecosystem, including an overview of the region's non-pelagic fisheries; and explains how the measures contained here are consistent with the MSA and other applicable laws.

This FEP has four goals:

Goal 1. Conserve and manage target and non-target stocks;
Goal 2. Protect species and habitats of special concern;
Goal 3. Understand and account for important ecosystem parameters and their linkages, and;
Goal 4. Meet the needs of fishermen, their families, and communities.

2.4 Pacific Remote Islands Area FEP Objectives

To achieve the policy and goals of the Pacific Remote Islands Area FEP, the Council has adopted the following objectives.

OBJECTIVE 1. Support Fishing Communities

a. Ensure that regulations designed to meet conservation objectives are written to be as minimally-constraining as possible.
b. Select alternatives that minimize adverse economic impacts to fishing communities when possible.
c. Eliminate regulations that are no longer necessary (i.e., eliminate access barriers).
d. Increase communication between fishery sectors.
e. Support projects, programs and policies that increase sustainable fishing opportunities and cooperative research.

OBJECTIVE 2: Prevent Overfishing on Council-managed Stocks

a. Develop status determination criteria for appropriate stocks.
b. Monitor fisheries to understand when overfishing may be close to occurring.

OBJECTIVE 3. Improve Fishery Monitoring and Data Collection

a. Increase the number of fishery ecosystem elements being monitored.
b. Improve the timeliness of data availability.
c. Improve the quantity and quality of relevant fishery data.
d. Encourage research to improve precision of data regarding protected species populations and distributions.
e. Increase research and data collection coordination among the Council, federal agencies, fishing industry, academia, non-governmental organizations and other entities.

OBJECTIVE 4. Promote Compliance

a. Understand factors that may result in non-compliance.
b. Consider ways to develop or increase buy-in from affected parties.
c. Ensure that regulations are written and implemented so as to be easy to follow and enforce.
d. Increase the quality and quantity of monitoring and enforcement data through improved technology.
e. Develop codes of conduct specific to individual fisheries.

OBJECTIVE 5. Reduce Bycatch and Minimize Interactions and Impacts to Protected Species

a. Maintain minimal impacts to protected species and other bycatch species while maintaining the viability of fisheries.
b. Encourage non-regulatory approaches to reducing protected species and bycatch impacts where necessary and appropriate.
c. Increase fishermen's knowledge about protected species issues and regulations and ways to minimize interactions.
d. Continue to work with federal agencies to protect relevant threatened and endangered species.
e. Improve assessment of protected species and bycatch species impacts through improvements in data collection, research and monitoring.
f. Encourage research that examines whether and to what extent bycatch is an issue in

the fisheries covered by this management plan.

OBJECTIVE 6. Refine and Minimize Impacts to Essential Fish Habitat

a. Review and update EFH and HAPC designations on regular schedule (5-years) based on the best available scientific information of a higher EFH level than was used for the original designation.
b. Identify and prioritize research to: assess adverse impacts to EFH and HAPC from fishing and non-fishing activities, including, but not limited to, military and ocean development activities.

OBJECTIVE 7. Increase Traditional and Local Knowledge in Decision-making

a. Identify relevant indigenous and local practices and knowledge that may improve scientific inquiry regarding Council-managed fisheries.
b. Utilize cultural practitioners, concepts, and bodies in the analysis of management alternatives.
c. Utilize fishermen knowledge in the analysis of management alternatives.

OBJECTIVE 8. Consider the Implications of Spatial Management Arrangements in Council Decision-making

a. Identify and prioritize research that examines the positive and negative consequences of current no-take fishing areas to fisheries, fishery ecosystems, and fishermen.
b. Consider whether the goals of any spatial-based fishing restrictions proposed in federal waters appear to be achievable.
c. Establish effective spatially-based fishing zones.
d. Remove spatial-based fishing restrictions that are no longer necessary.

OBJECTIVE 9. Consider the Implications of Climate Change in Council Decision-making

a. Identify and prioritize research that examines the effects of climate change on Council-managed fisheries and fishing communities.
b. Ensure climate change considerations are incorporated into the analysis of management alternatives.
c. Monitor climate-change related variables via the Council's Annual Reports.

3 MANAGEMENT REGIME AND FISHERY INFORMATION

This FEP pertains to demersal fisheries of the PRIA. Management measures for pelagic fisheries that occur in the PRIA can be found in the Fishery Ecosystem Plan for the Pacific Pelagic Fisheries of the Western Pacific Region. However, for completeness, we do provide some information about pelagic harvest from the PRIA area below.

Commercial data held by the State of Hawaii for the years 1988-2007 indicates that over this period a total of 51,740 lbs. of non-longline caught pelagic fish, and 19,095 lbs. of bottomfish and reef fish were caught at Palmyra, Kingman Reef and Johnston Island. This is an average of 1,293 lbs./year non-longline pelagic fish and 477 lbs./year of bottomfish and reef fish.

The largest volume of fish commercially harvested from the PRIA in recent times is pelagic fish caught by longliners home ported in Hawaii and tuna purse seiners home ported in American Samoa. Between 1991 and 2007, Hawaii longline vessels caught on average about 1.24 million lbs. of fish from the US EEZ around Johnston, Kingman and Palmyra and Jarvis islands, with about 60 percent coming from the US EEZ around Kingman and Palmyra and most of the remainder from the US EEZ around Johnston. US purse seine vessels have fished in the US EEZ of the equatorial located PRIA between 1997 and 2007, with 25 percent of their total catch coming from the PRIA in 1997, mainly from the US EEZ around Howland and Baker Islands, when about 35,000 mt of fish was taken within the EEZ. More recently, purse seine tuna catches from the equatorial located PRIA have ranged from about two to seven percent of the total catch, (about 2,000 to 5000 mt).

In 2002, the U.S. Air Force conducted fish tissue sampling within the Wake lagoon. Samples from bonefish (*Albula),* damselfish (*Neoniphon samara),* goatfish (*Mulloides flavolineatus; Parupeneus barberinus*), and squirrelfish (*Sargocentron xantherythrum)* were collected. Fish tissue data collected from the goatfish within the Wake lagoon detected levels of arsenic that exceed screening values. Recent testing indicates residual rodenticide levels in coral reef fish caught in the lagoon. There is a longstanding health advisory from eating fish caught in the Wake Island lagoon. The Department of Defense maintains environmental compliance instructions to Wake Island residents including fishing prohibitions (see Appendix F).

3.1 PRIA Bottomfish Fisheries

There are currently no bottomfish fisheries operating in the PRIA. The establishment of the PRIMNM prohibits all commercial fishing within its boundaries, which generally include all bottomfish habitat. This development essentially ended all actual and potential commercial bottomfishing in the PRIA.

In the past, low levels of commercial fishing have occurred at Palmyra Atoll and Kingman Reef, and recreational fishing, through the Nature Conservancy, is offered at Palmyra. In 1998, two Hawaii-based troll and handline vessels, and one demersal longline vessel targeting sharks fished in EEZ waters around Palmyra and Kingman Reef. These vessels targeted both pelagic and bottomfish species, including deep slope snappers, yellowfin and bigeye tuna, wahoo, mahimahi, and sharks (WPRFMC 2000b). One vessel made seven trips to these areas in 1999, targeting the

two-spot snapper, *Lutjanus bohar*, at Kingman Reef.

Several PRIA troll/handline/bottomfish fishing permits have been issued by NMFS, however, to date only one has been used.

Very little bottomfish research has been conducted in the PRIA to date. Research cruises to Howland, Baker, and Jarvis Islands and to Palmyra Atoll and Kingman Reef are periodically conducted by NMFS. These continuing investigations are mainly focus on the status of the shallow-water habitat including percentage of live reef coverage, biodiversity, and reef species stock assessments. Since the assessments are typically conducted with towed-sled scuba techniques, the deep-water habitat, including many of the commercially valuable snappers, is still unknown.

3.1.1 Type and Quantity of Fishing Gear

Bottomfish gear and fishing strategies are highly selective for desired species and sizes. Bottomfishers use a hook-and-line method of fishing in which weighted and baited lines are lowered and raised with electric, hydraulic, or hand-powered reels. The main line is typically 400–450 pounds test, with hook leaders of 80–120 pound test monofilament. The hooks are circle hooks, and a typical rig uses six to eight hooks branching off the main line. The weight is typically 5–6 pounds. The hook leaders are typically 2–3 feet long and separated by about 6 feet along the main line. Squid is the bait typically used. It is sometimes supplemented with a chum bag containing chopped fish or squid suspended above the highest hook.

3.1.2 Catch in Number or Weight

Commercial data held by the State of Hawaii for the years 1988-2007 indicates 19,095 lbs. of bottomfish and reef fish were caught at Palmyra, Kingman Reef and Johnston Island. This is an average of 477 lbs./year of bottomfish and reef fish.

3.1.3 Economics

There is no current or recent information on the economics of the fishery.

3.1.4 Present and Probable Future Condition of the Fishery

Bottomfish stocks in the PRIA are presumed to be healthy as there is no fishing mortality on these stocks. However, NMFS has not conducted surveys of bottomfish stocks in the PRIA in recent years.

3.1.5 Bottomfish Management Unit Species

Table 1. PRIA Bottomfish Management Unit Species.

Scientific Name	English Common Name
Aphareus rutilans	silver jaw jobfish
Caranx ignobilis	giant trevally
C. lugubris	black jack
Epinephelus fasciatus	blacktip grouper

E. quernus	sea bass
Etelis carbunculus	red snapper
E. coruscans	longtail snapper
Lethrinus rubrioperculatus	redgill emperor
Pristipomoides auricilla	yellowtail snapper
P. filamentosus	pink snapper
P. seiboldii	pink snapper
Variola louti	lunartail grouper

3.1.6 MSA Conservation and Management Measures

3.1.6.1 Management Areas and Subareas

The PRIA fishery management area is the EEZ seaward of Palmyra Atoll, Kingman Reef, Jarvis Island, Baker Island, Howland Island, Johnston Atoll, and Wake Island, Pacific Remote Island Areas with the inner boundary a line coterminous with the seaward boundaries of the above atolls, reefs and islands. The outer boundary is a line drawn in such a manner that each point on it is 200 nautical miles from the baseline from which the territorial sea is measured, or is coterminous with adjacent international maritime boundaries.

The following U.S. EEZ waters are no-take MPAs: landward of the 50 fathom curve at Jarvis, Howland, and Baker Islands, and Kingman Reef; as depicted on National Ocean Survey Chart Numbers 83116 and 83153.

All fishing for bottomfish MUS is prohibited within 12 nm of the islands in the Pacific Remote Islands Monument, subject to U.S. Fish and Wildlife Service authority to allow non-commercial fishing in consultation with NMFS and the Council. All commercial fishing is prohibited within the PRIMNM.

3.1.6.2 Permit and Reporting Requirements

Federal permits and logbook reporting are required for all vessels used to fish for bottomfish management unit species in the Pacific Remote Island Areas Subarea. Fishery participants have the option of using NMFS approved electronic logbooks in lieu of paper logbooks.

3.1.6.3 Gear Restrictions

To protect habitat and reduce bycatch, fishing for bottomfish and seamount groundfish with bottom trawls and bottom set gillnets is prohibited. Possession of a bottom trawl and bottom set gillnet by any vessel having a bottomfish permit or otherwise established to be fishing for bottomfish or seamount groundfish is prohibited. The possession or use of any poisons, explosives, or intoxicating substances for the purpose of harvesting bottomfish and seamount groundfish is prohibited.

3.1.6.4 At-sea Observer Coverage

To gather additional information, any fishing vessel that have a bottomfish permit fishing in the PRIA must carry an observer when directed to do so by the Regional Administrator. In addition, any fishing vessel (commercial or non-commercial) operating in the territorial seas or EEZ of the U.S. in a fishery identified through NMFS' annual determination process must carry an observer when directed to do so.

3.1.6.5 Framework for Regulatory Adjustments

By June 30 of each year, a Council-appointed bottomfish monitoring team will prepare an annual report on the fishery by area covering the topics identified in section 4.1.1.6. Indications of potential problems warranting further investigation may be signaled by the following indicator criteria: mean size of the catch of any species in any area is a pre-reproductive size; ratio of fishing mortality to natural mortality for any species; harvest capacity of the existing fleet and/or annual landings exceed best estimate of MSY in any area; significant decline (50 percent or more) in bottomfish catch per unit of effort from baseline levels; substantial decline in ex-vessel revenue relative to baseline levels; significant shift in the relative proportions of gear in any one area; significant change in the frozen/fresh components of the bottomfish catch; entry/exit of fishermen in any area; per-trip costs for bottomfishing exceed per-trip revenues for a significant percentage of trips; significant decline or increase in total bottomfish landings in any area; change in species composition of the bottomfish catch in any area; research results; habitat degradation or environmental problems; and reported interactions between bottomfish fishing operations and protected species.

The team may present management recommendations to the Council at any time. Recommendations may cover actions suggested for Federal regulations, state/territorial action, enforcement or administrative elements, and research and data collection. Recommendations will include an assessment of urgency and the effects of not taking action. The Council will evaluate the team's reports and recommendations, and the indicators of concern. The Council will assess the need for one or more of the following types of management action: catch limits, size limits, closures, effort limitations, access limitations, or other measures. The Council may recommend management action by either the state/territorial governments or by Federal regulation.

If the Council believes that management action should be considered, it will make specific recommendations to the NMFS Regional Administrator after requesting and considering the views of its Scientific and Statistical Committee and Bottomfish Advisory Panel and obtaining public comments at a public hearing. The Regional Administrator will consider the Council's recommendation and accompanying data, and, if he or she concurs with the Council's recommendation, will propose regulations to carry out the action. If the Regional Administrator rejects the Council's proposed action, a written explanation for the denial will be provided to the Council within 2 weeks of the decision. The Council may appeal denial by writing to the Assistant Administrator, who must respond in writing within 30 days.

3.1.6.6 Bycatch Measures

As described above, to protect habitat and reduce bycatch, fishing for bottomfish and seamount groundfish with bottom trawls and bottom set gillnets is prohibited and the possession or use of any poisons, explosives, or intoxicating substances for the purpose of harvesting bottomfish and

seamount groundfish is prohibited. In addition five types of non-regulatory measures aimed at reducing bycatch and bycatch mortality, and improving bycatch reporting are being implemented. They include: 1) outreach to fishermen and engagement of fishermen in management, including research and monitoring activities, to increase awareness of bycatch issues and to aid in development of bycatch reduction methods; 2) research into fishing gear and method modifications to reduce bycatch quantity and mortality; 3) research into the development of markets for discard species; and 4) improvement of data collection and analysis systems to better quantify bycatch; and 5) outreach and training of fishermen in methods to reduce baraotrauma in fish that are to be released.

3.1.6.7 Stock Status Determination Criteria

Biological and fishery data are poor for all bottomfish species in the PRIA. Generally, data are only available on commercial landings by species and catch-per-unit-effort (CPUE) for the multi-species complexes as a whole. At this time, it is not possible to partition these effort measures among the various Bottomfish Management Unit Species (BMUS).
The overfishing criteria and control rules specified are applied to individual species within the multi-species stock whenever possible. Where this is not possible, they will be based on an indicator species for the multi-species stock. It is important to recognize that individual species will be affected differently based on this type of control rule, and it is important that for any given species fishing mortality does not exceed a level that would lead to its becoming depleted or to causing impacts to the ecosystem. For the seamount groundfish stocks, armorhead serves as the indicator species. No indicator species will be used for the five managed bottomfish multi-species stock complexes (American Samoa, CNMI, Guam, Hawaii and the PRIA). Instead, the control rules are applied to each of the five stock complexes as a whole.[7]

The MSY control rule is used as the MFMT. The MFMT and MSST are specified based on the recommendations of Restrepo et al. (1998) and both are dependent on the natural mortality rate (M). The value of M used to determine the reference point values are not specified in this document. The latest estimate, published periodically in the SAFE report, is used and the value is occasionally re-estimated using the best available information. The range of M among species within a stock complex is taken into consideration when estimating and choosing the M to be used for the purpose of computing the reference point values.

In addition to the thresholds MFMT and the MSST, a warning reference point, B_{FLAG}, is also specified at some point above the MSST to provide a trigger for consideration of management action prior to B reaching the threshold. MFMT, MSST, and B_{FLAG} are specified as indicated in Table 2.

[7] The National Standards Guidelines allow overfishing of "other" components in a mixed stock complex if (1) long-term benefits to the nation are obtained, (2) similar benefits cannot be obtained by modification of the fishery to prevent the overfishing, and (3) the results will not necessitate ESA protection of any stock component or ecologically significant unit.

Table 2: Overfishing Threshold Specifications for Bottomfish and Seamount Groundfish stocks

MFMT	MSST	B_{FLAG}
$F(B) = \frac{F_{MSY} B}{c\, B_{MSY}}$ for $B \le c\, B_{MSY}$ $F(B) = F_{MSY}$ for $B > c\, B_{MSY}$	$c\, B_{MSY}$	B_{MSY}
Where c = max (1-M, 0.5)		

Standardized values of fishing effort (E) and catch-per-unit-effort (CPUE) are used as proxies for F and B, respectively, so E_{MSY}, $CPUE_{MSY}$, and $CPUE_{FLAG}$ are used as proxies for F_{MSY}, B_{MSY}, and B_{FLAG}, respectively.

In cases where reliable estimates of $CPUE_{MSY}$ and E_{MSY} are not available, they will be estimated from catch and effort times series, standardized for all identifiable biases. $CPUE_{MSY}$ will be calculated as half of a multi-year average reference CPUE, called $CPUE_{REF}$. The multi-year reference window will be objectively positioned in time to maximize the value of $CPUE_{REF}$. E_{MSY} will be calculated using the same approach or, following Restrepo et al. (1998), by setting E_{MSY} equal to E_{AVE}, where E_{AVE} represents the long-term average effort prior to declines in CPUE. When multiple estimates are available, the more precautionary will be used.

Since the MSY control rule specified here applies to multi-species stock complexes, it is important to ensure that no particular species within the complex has a mortality rate that leads to required protection. In order to accomplish this, a secondary set of reference points is specified to evaluate stock status with respect to recruitment overfishing. A secondary "recruitment overfishing" control rule is specified to control fishing mortality with respect to that status. The rule applies only to those component stocks (species) for which adequate data are available. The ratio of a current spawning stock biomass proxy ($SSBP_t$) to a given reference level ($SSBP_{REF}$) is used to determine if individual stocks are experiencing recruitment overfishing. SSBP is CPUE scaled by percent mature fish in the catch. When the ratio $SSBP_t/SSBP_{REF}$, or the "SSBP ratio" (SSBPR) for any species drops below a certain limit ($SSBPR_{MIN}$), that species is considered to be recruitment overfished and management measures will be implemented to reduce fishing mortality on that species. The rule will apply only when the SSBP ratio drops below the $SSBPR_{MIN}$, but it will continue to apply until the ratio achieves the "SSBP ratio recovery target" ($SSBPR_{TARGET}$), which will be set at a level no less than $SSBPR_{MIN}$. These two reference points and their associated recruitment overfishing control rule, which prescribes a target fishing mortality rate ($F_{RO\text{-}REBUILD}$) as a function of the SSBP ratio, are specified as indicated in Table 3. Again, E_{MSY} would be used as a proxy for F_{MSY}.

Table 3: Recruitment Overfishing Control Rule Specifications for Bottomfish and Seamount Groundfish Stocks

$F_{RO\text{-}REBUILD}$	$SSBPR_{MIN}$	$SSBPR_{TARGET}$
$F(SSBPR) = 0$ for $SSBPR \le 0.10$ $F(SSBPR) = 0.2\, F_{MSY}$ for $0.10 < SSBPR \le SSBPR_{MIN}$	0.20	0.30

$F(SSBPR) = 0.4\,F_{MSY}$ for $SSBPR_{MIN} < SSBPR \leq SSBPR_{TARGET}$		

Target Control Rules and Reference Points
No target control rules or reference points are currently specified for bottomfish stocks of the PRIA, i.e., while there is an established OY, it is not quantified or in the form of a control rule.

Rebuilding Control Rule and Reference Points
No rebuilding control rule or reference points are currently specified for the bottomfish stocks of the PRIA.

Stock Status Determination Process
Stock status determinations involve three procedural steps. First, the appropriate MSY, target or rebuilding reference points are specified. However, because environmental changes may affect the productive capacity of the stocks, it may be necessary to occasionally modify the specifications of some of the reference points or control rules. Modifications may also be desirable when better assessment methods become available, when fishery objectives are modified (e.g., OY), or better biological, socio-economic, or ecological data become available.

Second, the values of the reference points are estimated and third, the status of the stock is determined by estimating the current or recent values of fishing mortality and stock biomass or their proxies and comparing them with their respective reference points.

The second step (including estimation of M, on which the values of the overfishing thresholds will be dependent) and third step will be undertaken by NMFS and the latest results published annually in the Stock Assessment and Fishery Evaluation (SAFE) report. In practice, the second and third steps may be done simultaneously—in other words, the reference point values could be re-estimated as often as the stocks' status. No particular stock assessment period or schedule is specified, but in practice the assessments are likely to be conducted periodically in coordination with the preparation of the annual SAFE report.

The best information available is used to estimate the values of the reference points and to determine the status of stocks in relation to the status determination criteria. The determinations are based on the latest available stock and fishery assessments. Information used in the assessments includes logbook data, creel survey data, vessel observer data, and the findings of fishery-independent surveys when they are conducted.

Measures to Address Overfishing and Overfished Stocks
To date no bottomfish stocks in the PRIA have been determined to be overfished or that overfishing is occurring. If in the future it is determined that overfishing is occurring, a stock is, or either of those two conditions is being approached, the Council will establish additional management measures. Measures that may be considered include additional area closures, seasonal closures, establishment of limited access systems, limits on catch per trip, limits on effort per trip, and fleet-wide limits on catch or effort.

The combination of control rules and reference points is illustrated in Figure 3. The primary control rules that will be applied to the stock complexes are shown in part (a). Note that the

position of the MSST is illustrative only; its value would depend on the best estimate of M at any given time. The secondary control rule that will be applied to particular species to provide for recovery from recruitment overfishing is shown in part (b).

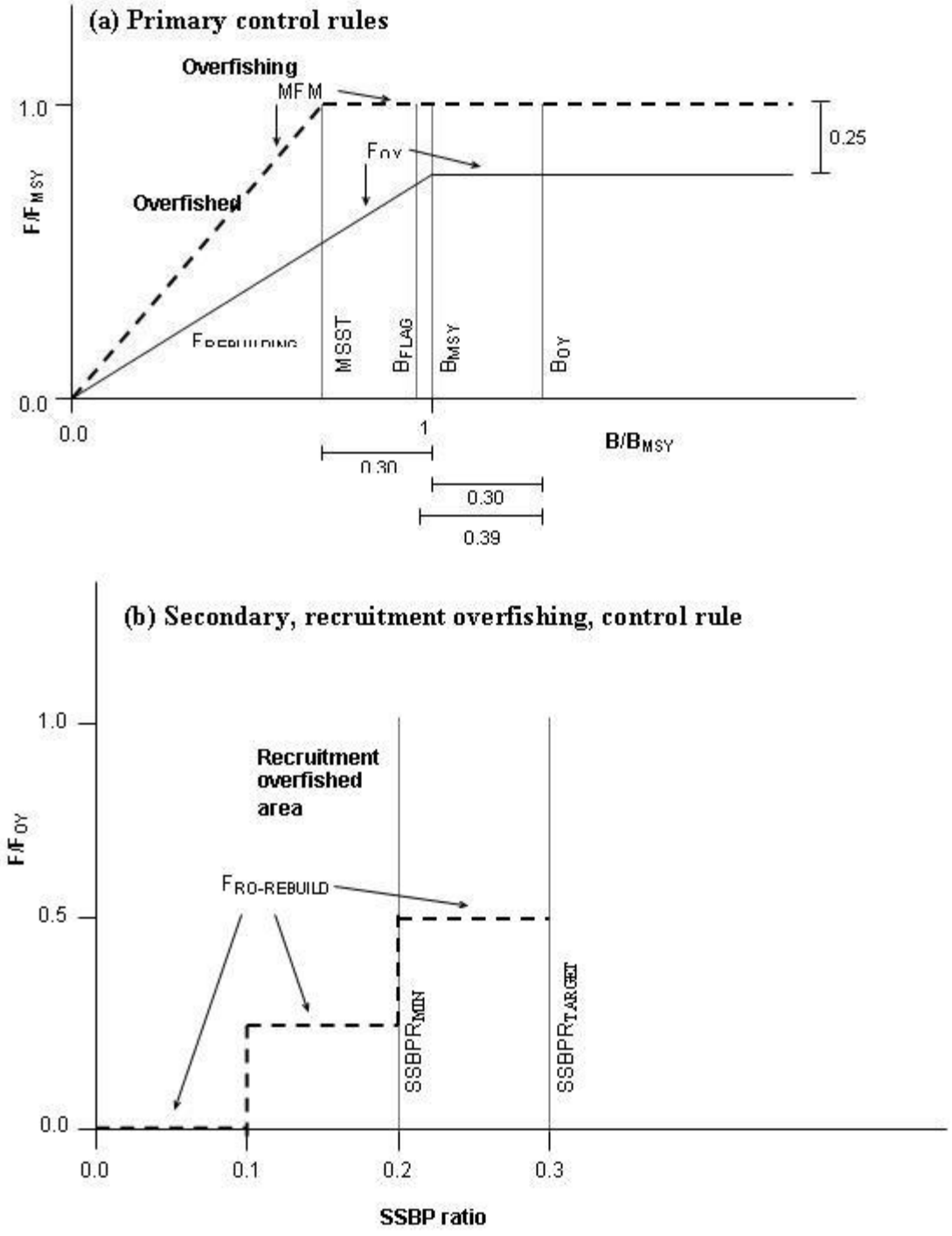

Figure 3: Combination of Control Rules and Reference Points for Bottomfish and Seamount Groundfish Stocks.

3.1.6.8 Annual Catch Limit

At this time, the Council and NMFS do not specify an ACL for BMUS in EEZ waters around the PRIA. This is because current federal regulations implementing the PRIA FEP (78 FR 32996, June 3, 2013) prohibit commercial and non-commercial fishing within 12 nautical miles around each of the seven islands and atolls that comprise the PRIA, unless authorized by the U.S. Fish and Wildlife Service under their respective authorities.

3.1.6.8.1 Specification Mechanism

Specification of the acceptable biological catch and annual catch limits are required by the MSA and follows the mechanism described in Appendix E. The specification will be done on an annual basis by NMFS based on recommendations from the Council.

3.1.6.8.2 Limit

There continues to be a functional equivalent of an ACL of zero for BMUS in the PRIA.

3.1.6.8.3 Accountability Measures

Accountability measures will be specified on an annual basis by NMFS based on recommendations by the Council. There is currently no in-season monitoring of crustacean catch in CNMI. The specification of accountability measures will follow the process described in Appendix E.

3.1.6.9 Yield

3.1.6.9.1 Maximum Sustainable Yield

There are no estimates available of MSY for bottomfish around the PRIA.

3.1.6.9.2 Optimal Yield

The OY is the percentage of the ACL that is caught by fishermen fishing in accordance with applicable fishery regulations in this FEP in the EEZ and adjacent waters of the Western Pacific Region.

3.1.6.9.3 Extent to Which Fishing Vessels will Harvest OY

Domestic vessels have sufficient harvesting capacity to catch the entire OY. Therefore, the TALFF is zero.

3.1.6.9.4 Extent to Which US Fish Processors will Process OY

If bottomfish fisheries did develop within the PRIA, it would be likely that all fish harvested would be processed by US processors.

3.1.6.10 Review of PRIA Bottomfish Bycatch

There is currently very little bottomfish fishing activity in the PRIA. There are no finfish or invertebrate species captured in the bottomfish fisheries whose capture or retention is prohibited by law. No observer data are available in the bottomfish fisheries of the PRIA.
However bycatch rates are relatively low in the bottomfish fisheries in other island areas. Only hook-and-line gears are used in the bottomfish fisheries, and these gears strongly select for carnivores, particularly aggressive predators. These types of species, with the exception of

sharks, tend to be favored in markets, thus they tend to be retained as target species. The flesh of many shark species is difficult to market, and shark fins have recently become much more difficult to market because of the prohibition on finning.

3.1.6.11 Regulations implementing International Recommendations and other Applicable Laws

3.1.7 Bottomfish Essential Fish Habitat

Except for several of the major commercial species, very little is known about the life histories, habitat utilization patterns, food habits, or spawning behavior of most adult bottomfish and seamount groundfish species. Furthermore, very little is known about the distribution and habitat requirements of juvenile bottomfish.

Generally, the distribution of adult bottomfish in the Western Pacific Region is closely linked to suitable physical habitat. Unlike the U.S. mainland with its continental shelf ecosystems, Pacific islands are primarily volcanic peaks with steep drop-offs and limited shelf ecosystems. The BMUS under the Council's jurisdiction are found concentrated on the steep slopes of deepwater banks. The 100-fathom isobath is commonly used as an index of bottomfish habitat. Adult bottomfish are usually found in habitats characterized by a hard substrate of high structural complexity. The total extent and geographic distribution of the preferred habitat of bottomfish is not well known. Bottomfish populations are not evenly distributed within their natural habitat; instead, they are found dispersed in a non-random, patchy fashion. Deepwater snappers tend to aggregate in association with prominent underwater features, such as headlands and promontories.

There is regional variation in species composition, as well as a relative abundance of the MUS of the deepwater bottomfish complex in the Western Pacific Region. At this time, very little information is available on the BMUS EFH found in the PRIA, however, it is expected that BMUS would be found in similar habitats at similar depths as they are in other Council-managed island areas.

To reduce the complexity and the number of EFH identifications required for individual species and life stages, the Council has designated EFH for bottomfish assemblages pursuant to Section 600.805(b) of 62 FR 66551. The species complex designations include deep-slope bottomfish (shallow water and deep water) and seamount groundfish complexes. The designation of these complexes is based on the ecological relationships among species and their preferred habitat. These species complexes are grouped by the known depth distributions of individual BMUS throughout the Western Pacific Region.

3.1.7.1 Description and Identification of EFH

At present, there is not enough data on the relative productivity of different habitats to develop EFH designations based on Level 3 or Level 4 data. Given the uncertainty concerning the life histories and habitat requirements of many BMUS, the Council designated EFH for adult and juvenile bottomfish as the water column and all bottom habitat extending from the shoreline to a depth of 400 meters (200 fathoms) encompassing the steep drop-offs and high-relief habitats that are important for bottomfish throughout the Western Pacific Region.

The eggs and larvae of all BMUS are pelagic, floating at the surface until hatching and subject thereafter to advection by the prevailing ocean currents. There have been few taxonomic studies of these life stages of snappers (lutjanids) and groupers (epinepheline serranids). Presently, few larvae can be identified to species. As snapper and grouper larvae are rarely collected in plankton surveys, it is extremely difficult to study their distribution. Because of the existing scientific uncertainty about the distribution of the eggs and larvae of bottomfish, the Council designated the water column extending from the shoreline to the outer boundary of the EEZ to a depth of 400 meters as EFH for bottomfish eggs and larvae throughout the Western Pacific Region.

3.1.7.2 Identification of Habitat Areas of Particular Concern

On the basis of the known distribution and habitat requirements of adult bottomfish, the Council designated all escarpments/slopes between 40–280 meters throughout the Western Pacific Region, including the Pacific Remote Island Areas, as bottomfish HAPC. In addition, the Council designated the three known areas of juvenile opakapaka habitat (two off Oahu and one off Molokai) as HAPC. The basis for this designation is the ecological function that these areas provide, the rarity of the habitat, and the susceptibility of these areas to human-induced environmental degradation. The recent discovery of concentrations of juvenile snappers in relatively shallow water and featureless bottom habitat indicates the need for more research to help identify, map, and study nursery habitat for juvenile snapper in the PRIA.

3.2 PRIA Coral Reef Fisheries

No coral reef fisheries occur at Howland, Baker, Jarvis Islands, Johnston Atoll, and Kingman Reef. Limited non-commercial coral reef fishing occurs at Palmyra and Wake Atolls (See Appendix F for Department of Defense rules applicable for Wake Atoll).

3.2.1 Type and Quantity of Fishing Gear

All gears used to catch coral reef species are essentially artisanal in nature. Catch rates are minimal, usually only a few pounds per man hour or other unit of effort. Large catches thus depend on fishing methods employing a lot of people, such as driven-in-net fishing or group spear fishing. Four fishing gears predominate in Hawaiian archipelago coral reefs and lagoons: hook and line (including handline), spearguns, fish traps, and gillnets.

3.2.2 Catch in Number or Weight

No information is available on the number or weight of fish being caught at Wake and Palmyra Atolls as authorized by the USFWS.

3.2.3 Economics

There is no information available on the economics of the tag and release sport fishery that targets bonefish and jacks at Palmyra Atoll.

3.2.4 Present and Probable Future Condition of the Fishery

NMFS PIFSC conducts coral reef monitoring surveys of the PRIA. Data derived from the surveys indicated that populations of coral reef species in the PRIA are stable. Future condition

of coral reef stocks are predicted to be healthy, with potential future impacts associated with increased sea surface temperature and acidification. See the Annual Report for more information.

3.2.5 Coral Reef Management Unit Species

Table 4. PRIA Coral Reef Ecosystem Management Unit Species, Currently Harvested Coral Reef Taxa

Family Name	Scientific Name	English Common Name
Acanthuridae (Surgeonfishes)	*Acanthurus olivaceus*	orange-spot surgeonfish
	Acanthurus xanthopterus	yellowfin surgeonfish
	Acanthurus triostegus	convict tang
	Acanthurus dussumieri	eye-striped surgeonfish
	Acanthurus nigroris	blue-lined surgeon
	Acanthurus leucopareius	whitebar surgeonfish
	Acanthurus lineatus	blue-banded surgeonfish
	Acanthurus nigricauda	blackstreak surgeonfish
	Acanthurus nigricans	whitecheek surgeonfish
	Acanthurus guttatus	white-spotted surgeonfish
	Acanthurus blochii	ringtail surgeonfish
	Acanthurus nigrofuscus	brown surgeonfish
	Ctenochaetus strigosus	yellow-eyed surgeonfish
	Ctenochaetus striatus	striped bristletooth
	Ctenochaetus binotatus	twospot bristletooth
	Zebrasoma flavescens	yellow tang
	Naso unicornus	bluespine unicornfish
	Naso lituratus	orangespine unicornfish
	Naso hexacanthus	black tongue unicornfish
	Naso vlamingii	bignose unicornfish
	Naso annulatus	whitemargin unicornfish
	Naso brevirostris	spotted unicornfish
Labridae	*Cheilinus undulatus*	Napoleon wrasse

Family Name	**Scientific Name**	**English Common Name**
(Wrasses)	*Cheilinus trilobatus*	triple-tail wrasse
	Cheilinus chlorourus	floral wrasse
	Oxycheilinus unifasciatus	ring-tailed wrasse
	Oxycheilinus diagrammus	bandcheek wrasse
	Hemigymnus fasciatus	barred thicklip
	Halichoeres trimaculatus	three-spot wrasse
	Thalassoma quinquevittatum	red ribbon wrasse
	Thalassoma lutescens	sunset wrasse
Mullidae (Goatfishes)	*Mulloidichthys* spp.	yellow goatfish
	Mulloidichthys pfleugeri	orange goatfish
	Mulloidichthys flavolineatus	yellowstripe goatfish
	Parupeneus spp.	banded goatfish
Mullidae (Goatfishes)	*Parupeneus barberinus*	dash-dot goatfish
	Parupeneus cyclostomas	yellowsaddle goatfish
	Parupeneus multifaciatus	multi-barred goatfish
	Upeneus arge	bantail goatfish
Mugilidae (Mullets)	*Crenimugil crenilabis*	fringelip mullet
	Moolgarda engeli	Engel's mullet
	Neomyxus leuciscus	false mullet
Muraenidae (Moray eels)	*Gymnothorax flavimarginatus*	yellowmargin moray eel
	Gymnothorax javanicus	giant moray eel
	Gymnothorax undulatus	undulated moray eel
Octopodidae	*Octopus cyanea*	octopus
	Octopus ornatus	octopus
Pricanthidae (Bigeye)	*Heteropriacanthus cruentatus*	glasseye
Scaridae (Parrotfishes)	*Bolbometopon muricatum*	humphead parrotfish
	Scarus spp.	parrotfish
	Hipposcarus longiceps	pacific longnose parrotfish

Family Name	Scientific Name	English Common Name
	Calotomus carolinus	stareye parrotfish
Scombridae	*Gymnosarda unicolor*	dogtooth tuna
Sphyraenidae (Barracuda)	*Sphyraena barracuda*	great barracuda

Table 5. PRIA Coral Reef Ecosystem Management Unit Species, Potentially Harvested Coral Reef Taxa

Scientific Name	English Common Name
Labridae	wrasses (Those species not listed as CHCRT)
Carcharhinidae Sphyrnidae	sharks (Those species not listed as CHCRT)
Myliobatidae Mobulidae	rays and skates
Serrandiae	groupers (Those species not listed as CHCRT or as BMUS)
Carangidae	jacks and scads (Those species not listed as CHCRT or as BMUS)
Holocentridae	solderfishes and squirrelfishes,(Those species not listed as CHCRT)
Mullidae	goatfishes,(Those species not listed as CHCRT)
Ephippidae	batfishes
Haemulidae	sweetlips
Echeneidae	remoras
Malacanthidae	tilefishes
Pseudochromidae	dottybacks
Plesiopidae	prettyfins
Acanthuridae	surgeonfishes (Those species not listed as CHCRT)
Lethrinidae	emperors (Those species not listed as CHCRT or as BMUS)
Clupeidae	herrings
Gobiidae	gobies
Lutjanidae	snappers (Those species not listed as CHCRT or as BMUS)
Balistidae	trigger fishes (Those species not listed as CHCRT)
Siganidae	rabbitfishes (Those species not listed as CHCRT)

Scientific Name	English Common Name
Muraenidae Chlopsidae Congridae Ophichthidae	eels (Those species not listed as CHCRT)
Apogonidae	cardinalfishes
Zanclidae	moorish idols
Chaetodontidae	butterfly fishes
Pomacanthidae	angelfishes
Pomacentridae	damselfishes
Scorpaenidae	scorpionfishes
Blenniidae	blennies
Sphyraenidae	barracudas (Those species not listed as CHCRT)
Pinguipedidae	sandperches
Kyphosidae	rudderfishes (Those species not listed as CHCRT)
Caesionidae	fusiliers
Cirrhitidae	hawkfishes (Those species not listed as CHCRT)
Antennariidae	frogfishes
Syngnathidae	pipefishes and seahorses
Bothidae	flounders and soles
Ostraciidae	trunkfishes
Tetradontidae	puffer fishes and porcupine fishes
Aulostomus chinensis	trumpetfish
Fistularia commersoni	cornetfish
Heliopora	blue corals
Tubipora	organpipe corals
Azooxanthellates	ahermatypic corals
Fungiidae	mushroom corals
	small and large coral polyps

Scientific Name	English Common Name
Millepora	fire corals
	soft corals and gorgonians
Actinaria	anemones
Zoanthinaria	soft zoanthid corals
Hydrozoans and Bryzoans	
Tunicates	sea squirts
Echinoderms	sea cucumbers and sea urchins
Mollusca	Those species not listed as CHCRT
Gastropoda	sea snails
Trochus spp.	
Opistobranchs	sea slugs
Pinctada margaritifera	black lipped pearl oyster
Tridacnidae	giant clam
Other Bivalves	other clams
Cephalopods	
Crustaceans	lobsters, shrimps/mantis shrimps, true crabs and hermit crabs (Those species not listed as CMUS)
Porifera	sponges
Stylasteridae	lace corals
Solanderidae	hydroid corals
Annelids	segmented worms
Algae	seaweed
Live rock	
All other coral reef ecosystem management unit species that are marine plants, invertebrates, and fishes that are not listed in the preceding tables or are not bottomfish management unit species, crustacean management unit species, Pacific pelagic management unit species, precious coral or seamount groundfish.	

3.2.6 MSA Conservation and Management Measures

3.2.6.1 Management Areas

The PRIA fishery management area is the EEZ seaward of Palmyra Atoll, Kingman Reef, Jarvis Island, Baker Island, Howland Island, Johnston Atoll, and Wake Island, Pacific Remote Island Areas with the inner boundary a line coterminous with the seaward boundaries of the above atolls, reefs and islands PRIA and the outer boundary a line drawn in such a manner that each point on it is 200 nautical miles from the baseline from which the territorial sea is measured, or is coterminous with adjacent international maritime boundaries.

The following U.S. EEZ waters are no-take MPAs: Landward of the 50 fathom curve at Jarvis, Howland, and Baker Islands, and Kingman Reef; as depicted on National Ocean Survey Chart Numbers 83116 and 83153.

In addition, all fishing for coral reef MUS is prohibited within 12 nm of the islands in the Pacific Remote Islands Monument, subject to U.S. Fish and Wildlife Service authority to allow non-commercial fishing in consultation with NMFS and the Council. All commercial fishing is prohibited within the PRIMNM.

3.2.6.2 Permit and Reporting Requirements

To fish for coral reef MUS outside of any no-take area, special permits are required for any directed fisheries on potentially harvested coral reef taxa (PHCRT) within the regulatory area, or to fish for any CRE MUS in the coral reef regulatory area with any gear not normally permitted. Requiring permits allows the Council and NMFS to identify participants, collect harvest and effort data, and control harvests.

The US Fish and Wildlife Service and the Department of Defense do not have permit and reporting requirements for fishing activities allowed around Wake Island and Palmyra Atoll.

3.2.6.3 Gear Restrictions

To protect habitat and reduce bycatch, allowable gear types are: (1) hand harvest; (2) spear; (3) slurp gun; (4) hand/dip net; (5) hoop net for Kona crab; (6) throw net; (7) barrier net; (8) surround/purse net that is attended at all times; (9) hook-and-line (powered and unpowered handlines, rod and reel, and trolling); (10) crab and fish traps with vessel ID number affixed; and (11) remote operating vehicles/submersibles. New fishing gears that are not included in the allowable gear list may be allowed under the special permit provision.

CRE MUS may not be taken by means of poisons, explosives, or intoxicating substances. Possession and use of these materials is prohibited. In addition, CRE MUS may not be taken by means of spearfishing with SCUBA at night (from 1800 – 0600 hrs.) in the U.S. EEZ around Howland Island, Baker Island, Jarvis Island, Johnston Atoll, Kingman Reef and Palmyra Atoll.

All fish and crab trap gear used by permit holders must be identified with the vessel number.

3.2.6.4 At-sea observer coverage

[need to identify]

3.2.6.5 Framework Procedures

A framework process, providing for an administratively simplified procedure to facilitate adjustments to management measures previously analyzed in the CRE FMP, is an important component of the FEP. These framework measures include designating "no-anchoring" zones and establishing mooring buoys, requiring vessel monitoring systems on board fishing vessels, designating areas for the sole use of indigenous peoples, and including species not specifically listed as PHCRT under the "special permit" regime as warranted. A general fishing permit program could also be established for all U.S. EEZ coral reef ecosystem fisheries under the framework process. Framework measures are implemented via preparation of a draft document that outlines the need for action, analyzes alternatives, provides supporting material, and describes how other Federal laws may be applicable. A notice is then placed in the Federal Register and the document is made available for public comment. A public hearing may also be required. After receiving and addressing all public comments, the document is revised prior to the next Council meeting, when the Council votes on it.

3.2.6.6 MSY Control Rule and Stock Status Determination

Available biological and fishery data are poor for all coral reef ecosystem management unit species in the PRIA. There is scant information on the life histories, ecosystem dynamics, fishery impact, community structure changes, yield potential, and management reference points for many coral reef ecosystem species. Additionally, total fishing effort cannot be adequately partitioned between the various MUS for any fishery or area. Biomass, maximum sustainable yield, and fishing mortality estimates are not available for any single MUS. Once these data are available, fishery managers will then be able to establish limits and reference points based on the multi-species coral reef ecosystem as a whole.

When possible, the MSY control rule should be applied to the individual species in a multi-species stock. When this is not possible, MSY may be specified for one or more species; these values can then be used as indicators for the multi-species stock's MSY.

Clearly, any given species that is part of a multi-species complex will respond differently to an OY-determined level of fishing effort (F_{OY}). Thus, for a species complex that is fished at F_{OY}, managers still must track individual species' mortality rates in order to prevent species-specific population declines that would lead to their becoming depleted.

For the coral reef fisheries, the multi-species complex as a whole is used to establish limits and reference points for each area.

When possible, available data for a particular species will be used to evaluate the status of individual MUS stocks in order to prevent recruitment overfishing. When better data and the appropriate multi-species stock assessment methodologies become available, all stocks will be evaluated independently, without proxy.

Establishing Reference Point Values

Standardized values of catch per unit effort (CPUE) and effort (E) are used to establish limit and reference point values, which act as proxies for relative biomass and fishing mortality,

respectively. Limits and reference points are calculated in terms of $CPUE_{MSY}$ and E_{MSY} included in Table 6.

Table 6: CPUE-Based Overfishing Limits and Reference Points for Coral Reef Species

Value	Proxy	Explanation
MaxFMT (F_{MSY})	E_{MSY}	0.91 $CPUE_{MSY}$
F_{OY}	0.75 E_{MSY}	suggested default scaling for target
B_{MSY}	$CPUE_{MSY}$	operational counterpart
B_{OY}	1.3 $CPUE_{MSY}$	simulation results from Mace (1994)
MinSST	0.7 $CPUE_{MSY}$	suggested default (1-M)B_{MSY} with M=0.3*
B_{FLAG}	0.91 $CPUE_{MSY}$	suggested default (1-M)B_{OY} with M=0.3*

When reliable estimates of E_{MSY} and $CPUE_{MSY}$ are not available, they are estimated from the available time series of catch and effort values, standardized for all identifiable biases using the best available analytical tools. $CPUE_{MSY}$ is calculated as one-half a multi-year moving average reference CPUE ($CPUE_{REF}$).

Measures to Address Overfishing and Overfished Stocks

At present, no CRE stocks in the PRIA have been determined to be overfished or subject to overfishing. If in the future it is determined that overfishing is occurring, a stock is overfished, or either of those two conditions is being approached, the Council will establish additional management measures. Measures that may be considered include additional area closures, seasonal closures, establishment of limited access systems, limits on catch per trip, limits on effort per trip, and fleet-wide limits on catch or effort.

While managing the multi-species stocks to provide maximum benefit, fishery managers must also ensure that the resulting fishing mortality rate does not reduce any individual species stock to a level that would lead to its becoming depleted. Preventing recruitment overfishing on any component stock will satisfy this need in a precautionary manner. Best available data are used for each fishery to estimate these values. These reference points will be related primarily to recruitment overfishing and will be expressed in units such as spawning potential ratio or spawning stock biomass. However, no examples can be provided at present. Species' for which managers have collected extensive survey data and know their life history parameters, such as growth rate and size at reproduction, are the best candidates for determining these values.

Using the best available data, managers will monitor changes in species abundance and/or composition. They will pay special attention to those species they consider important because of their trophic level or other ecological importance to the larger community.

3.2.6.7 Annual Catch Limit

At this time, the Council and NMFS do not specify an ACL for CREMUS in EEZ waters around the PRIA. This is because current federal regulations implementing the PRIA FEP (78 FR 32996,

June 3, 2013) prohibit commercial and non-commercial fishing within 12 nautical miles around each of the seven islands and atolls that comprise the PRIA, unless authorized by the U.S. Fish and Wildlife Service under their respective authorities.

3.2.6.7.1 Specification Mechanism

For coral reef MUS, the specification of the acceptable biological catch and annual catch limits are required by the MSA and follows the mechanism described in Appendix E. The specification will be done on an annual basis by NMFS based on recommendations from the Council.

3.2.6.7.2 Limit

There continues to be a functional equivalent of an ACL of zero for CREMUS in the PRIA.

3.2.6.7.3 Accountability Measures

Accountability measures will be specified on an annual basis by NMFS based on recommendations by the Council. There is currently no in-season monitoring of crustacean catch in CNMI. The specification of accountability measures will follow the process described in Appendix E.

3.2.6.8 Yield

3.2.6.8.1 Maximum Sustainable Yield

No MSY estimates are available for PRIA coral reef ecosystem management unit species.

3.2.6.8.2 Optimal Yield

The OY is the percent of the ACL that is harvested for coral reef ecosystem associated species.

3.2.6.8.3 Extent to Which Fishing Vessels will Harvest OY

Domestic vessels have sufficient harvesting capacity to take the entire OY. Therefore, the Total Allowable Level of Foreign Fishing (TALFF) is zero.

3.2.6.8.4 Extent to Which U.S. Fish Processors will Process OY

If coral reef fisheries did develop within the PRIA, it would be likely certain that all fish harvested would be processed by US processors.

3.2.6.9 Review of PRIA Coral Reef Bycatch

No information is currently available on bycatch in the PRIA's coral reef fisheries. However, given that fishing activity is limited and the nature of coral reef fishing gear, techniques, and fish utilization, bycatch is unlikely. If a future fishery is established, bycatch reporting would be required and future bycatch reduction methodology may be established if deemed necessary.

3.2.6.10 Regulations implementing International Recommendations and other Applicable Laws

3.2.7 Coral Reef Essential Fish Habitat

In designating EFH for Coral Reef Ecosystem MUS, MUS are linked to specific habitat "composites" (e.g., sand, live coral, seagrass beds, mangrove, open ocean) for each life history stage, consistent with the depth of the ecosystem to 50 fathoms and to the limit of the EEZ.

Except for several of the major coral reef associated species, very little is known about the life histories, habitat utilization patterns, food habits, or spawning behavior of most coral reef associated species. For this reason, the Council, through the CRE-FMP, designated EFH using a two-tiered approach based on the division of MUS into the Currently Harvested Coral Reef Taxa (CHCRT) and Potentially Harvested Coral Reef Taxa (PHCRT) categories. This is also consistent with the use of habitat composites.

3.2.7.1 Identification and Description of Currently Harvested Coral Reef Taxa EFH

In the first tier, EFH has been identified for species that (a) are currently being harvested in state and federal waters and for which some fishery information is available and (b) are likely to be targeted in the near future based on historical catch data.

To reduce the complexity and the number of EFH identifications required for individual species and life stages, the Council has designated EFH for species assemblages pursuant to 50 CFR 600.815 (a)(2)(ii)(E). The designation of these complexes is based on the ecological relationships among species and their preferred habitat. These species complexes are grouped by the known depth distributions of individual MUS. The textual EFH designations for CHCRT throughout the Western Pacific Region are found in Table 7.

3.2.7.2 Identification and Description of Potentially Harvested Coral Reef Taxa EFH

EFH has also been designated for the second tier, PHCRT. These taxa include literally thousands of species encompassing almost all coral reef fauna and flora. However, there is very little scientific knowledge about the life histories and habitat requirements of the thousands of species of organisms that compose these taxa. In fact, a large percentage of these biota have not been described by science. Therefore, the Council has used the precautionary approach in designating EFH for PHCRT so that enough habitat is protected to sustain managed species.

EFH for all life stages of Potentially Harvested Coral Reef Taxa is designated as the water column and bottom habitat from the shoreline to the outer boundary of the EEZ to a depth of 50 fathoms (Table 7). As with CHCRT, the Council has designated EFH for species assemblages pursuant to the federal regulations cited above.

Table 7. EFH Designations for Coral Reef Taxa.

Species Assemblage/Complex	EFH (Egg and Larvae)	EFH (Adult and Juvenile)
Acanthuridae	The water column from the shoreline to the outer boundary of the EEZ to a depth of 50 fm.	All bottom habitat and the adjacent water column from 0 to 50 fm.
Balistidae	The water column from the shoreline to the outer boundary of the EEZ to a depth of 50 fm.	All bottom habitat and the adjacent water column from 0 to 50 fm.
Carangidae	The water column from the shoreline to the outer boundary of the EEZ to a depth of 50 fm.	All bottom habitat and the adjacent water column from 0 to 50 fm.
Carcharhinidae	N/A	All bottom habitat and the adjacent water column from 0 to 50 fm to the outer extent of the EEZ.
Holocentridae	The water column from the shoreline to the outer boundary of the EEZ to a depth of 50 fm.	All rocky and coral areas and the adjacent water column from 0 to 50 fm.
Kuhliidae	The water column from the shoreline to the outer limits of the EEZ to a depth of 50 fm.	All bottom habitat and the adjacent water column from 0 to 25 fm.
Kyphosidae	Egg, larvae, and juvenile: the water column from the shoreline to the outer boundary of the EEZ to a depth of 50 fm.	All rocky and coral bottom habitat and the adjacent water column from 0 to 15 fm.
Labridae	The water column and all bottom habitat extending from the shoreline to the outer boundary of the EEZ to a depth of 50 fm.	

Species Assemblage/Complex	EFH (Egg and Larvae)	EFH (Adult and Juvenile)
Mullidae	The water column extending from the shoreline to the outer boundary of the EEZ to a depth of 50 fm.	All rocky/coral and sand-bottom habitat and adjacent water column from 0 to 50 fm.
Mugilidae	The water column from the shoreline to the outer limits of the EEZ to a depth of 50 fm.	All sand and mud bottoms and the adjacent water column from 0 to 25 fm.
Muraenidae	The water column from the shoreline to the outer boundary of the EEZ to a depth of 50 fm.	All rocky and coral areas and the adjacent water column from 0 to 50 fm.
Octopodidae	Larvae: The water column from the shoreline to the outer limits of the EEZ to a depth of 50 fm.	EFH for the adult, juvenile phase, and demersal eggs is defined as all coral, rocky, and sand-bottom areas from 0 to 50 fm.
Polynemidae	The water column extending from the shoreline to the outer boundary of the EEZ to a depth of 50 fm.	All rocky/coral and sand-bottom habitat and the adjacent water column from 0 to 50 fm.
Priacanthidae	The water column extending from the shoreline to the outer boundary of the EEZ to a depth of 50 fm.	All rocky/coral and sand-bottom habitat and the adjacent water column from 0 to 50 fm.
Scaridae	The water column from the shoreline to the outer limit of the EEZ to a depth of 50 fm.	All bottom habitat and the adjacent water column from 0 to 50 fm
Siganidae	The water column from the shoreline to the outer boundary of the EEZ to a depth of 50 fm.	All bottom habitat and the adjacent water column from 0 to 50 fm.

Species Assemblage/Complex	**EFH (Egg and Larvae)**	**EFH (Adult and Juvenile)**
Scombridae	EFH for all life stages of dogtooth tuna is designated as the water column from the shoreline to the outer boundary of the EEZ to a depth of 50 fm.	
Sphyraenidae	EFH for all life stages in the family Sphyraenidae is designated as the water column from the shoreline to the outer boundary of the EEZ to a depth of 50 fm.	
Turbinidae	The water column from the shoreline to the outer boundary of the EEZ to a depth of 50 fm.	All bottom habitat and the adjacent water column from 0 to 50 fm.
Aquarium Species/Taxa	All waters from 0–50 fm from the shoreline to the limits of the EEZ.	All coral, rubble, or other hard-bottom features and the adjacent water column from 0–50 fm.
All Potentially Harvested Coral Reef Taxa	EFH for all life stages of Potentially Harvested Coral Reef Taxa is designated as the water column and bottom habitat from the shoreline to the outer boundary of the EEZ to a depth of 50 fm.	

3.2.7.3 Identification of Habitat Areas of Particular Concern

Because of the already-noted lack of scientific data, the Council considered locations that are known to support populations of Coral Reef Ecosystem MUS and meet NMFS criteria for HAPC. Although not one of the criteria established by NMFS, the Council considered designating areas that are already protected—for example, wildlife refuges—as HAPC because such areas have been singled out for their ecological values during their designation as a protected area, and therefore would likely meet the HAPC criteria as well. The Coral Reef Ecosystem MUS HAPCs for Pacific Remote Island Areas identified in Table 8 have met at least one of the four criteria listed above, or the fifth criterion just identified (i.e., protected areas). However, a great deal of life history work needs to be done in order to adequately identify the extent of HAPCs and link them to particular species or life stages.

Table 8. Coral Reef Ecosystem HAPC Designations in the Pacific Remote Island Area.

US Pacific Remote Island	Rarity of Habitat	Ecological Function	Susceptibility to Human Impacts	Likelihood of Development Impacts	Existing Protective Status
Wake Atoll	x	x			x
Johnston Atoll	x	x		x	x
Palmyra Atoll	x	x	x		x
Kingman Reef	x	x	x		x
Howland Island	x	x			x
Baker Island	x	x			x
Jarvis Island	x	x			x

3.3 Crustaceans

3.3.1 Description of Crustacean Fisheries

Most of the PRIA are surrounded by a narrow-fringing reef that drops steeply very close to the shore. There are no crustacean fisheries occurring in the PRIA. In the past, fishermen have expressed interest in fishing for lobsters in the PRIA, and at least two have attempted it. In 1999, one vessel left Hawaii to explore the lobster fishery in Palmyra/Kingman waters. However, tropical lobsters (green spiny, *P. penicillatus*) do not go into traps readily, and the lobster harvest was unsuccessful as 800 traps were deployed and no lobsters were caught. They also dove on the reef to try to catch lobsters by hand, but were not much more successful and returned with about 20 tails. In addition, this vessel deployed traps at 300–800 meters to target deep-water shrimp and red crab around Palmyra and Kingman.

There is virtually no research data regarding crustaceans in the PRIA. Detailed fishery data have been collected by the vessel mentioned above, which fished for deep-water shrimp around Palmyra in 1999.

3.3.1.1 Type and Quantity of Fishing Gear

Lobster fishing is done using nets and hand harvest, as lobsters do not enter traps in much of the Pacific.

Deepwater shrimp are caught using either trawls or traps. In areas where there is a continental shelf adjacent to a land mass, trawls are more effective. However, in Pacific island areas where there are more steep slopes, baited traps are more efficient. Traps are primarily used in the Western Pacific Region to catch deepwater shrimp.

Traps are made from steel, wire, and/or plastic with conical entrances that allow the shrimp to get into the trap, but not out. Trap lines are marked with flags and spaced out at approximately 30 meters apart. The traps are left out overnight to fish and collected the next day.

3.3.1.2 Catch in Number or Weight

No information is available on the number or weight of fish being caught at Wake and Palmyra Atolls as authorized by the USFWS.

3.3.1.3 Economics

No information exists on the economics of PRIA crustacean fisheries.

3.3.1.4 Present and Probable Future Condition of the Fishery

Crustacean stocks in the PRIA are assumed to be in healthy condition. There are no fisheries targeting crustaceans in the PRIA.

3.3.2 Crustacean Management Unit Species

Table 9. Crustacean Management Unit Species.

Scientific Name	English Common Name
Panulirus penicillatus	spiny lobster
Family Scyllaridae	slipper lobster
Ranina ranina	Kona crab
Heterocarpus spp.	deepwater shrimp

3.3.3 MSA Conservation and Management Measures

The PRIA were added to the Crustaceans Fishery Management Plan through publication of a final rule on September 12, 2006 (71 FR 53605) which became effective on October 12, 2006. While there are currently no known crustacean fisheries operating in the PRIA several vessels have been known to fish for crustaceans in Federal waters, although on a small scale.

3.3.3.1 Management Areas

Crustaceans Permit Area 4 means the EEZ around the PRIA.

The following U.S. EEZ waters are no-take MPAs: Landward of the 50 fathom curve at Jarvis, Howland, and Baker Islands, and Kingman Reef; as depicted on National Ocean Survey Chart Numbers 83116 and 83153.

In addition, all fishing is prohibited within 12 nm of the islands in the Pacific Remote Islands Monument, subject to U.S. Fish and Wildlife Service authority to allow non-commercial fishing in consultation with NMFS and the Council. All commercial fishing is prohibited within the PRIMNM.

3.3.3.2 Permit and Reporting Requirements

Federal permits and logbook reporting are required for all vessels used to fish for lobsters or deep-water shrimp in Permit Area 4. Fishery participants have the option of using NMFS approved electronic logbooks in lieu of paper logbooks.

3.3.3.3 Gear Restrictions

At present there are no gear restrictions for crustacean fisheries occurring in the PRIA.

3.3.3.4 At-sea Observer Coverage

To support fishery monitoring, all fishing vessels with a Crustaceans Permit for Permit Area 4 must carry an observer when requested to do so by the Regional Administrator. In addition, any fishing vessel (commercial or non-commercial) operating in the territorial seas or EEZ of the U.S. in a fishery identified through NMFS' annual determination process must carry an observer when directed to do so.

3.3.3.5 Framework Procedures

New management measures may be added through rulemaking if new information demonstrates that there are biological, social, or economic concerns. By June 30 of each year, the Council-appointed Crustaceans Plan Team will prepare an annual report on the fisheries in the management area. The report shall contain, among other things, recommendations for Council action and an assessment of the urgency and effects of such action(s).

Established measures are management measures that, at some time, have been included in regulations implementing the FEP, and for which the impacts have been evaluated in Council/NMFS documents in the context of current conditions. Following the framework procedures of Amendment 9 to the FMP, the Council may recommend to the NMFS Regional Administrator that established measures be modified, removed, or re-instituted. Such recommendation shall include supporting rationale and analysis, and shall be made after advance public notice, public discussion, and consideration of public comment. NMFS may implement the Council's recommendation by rulemaking if approved by the Regional Administrator.

New measures are management measures that have not been included in regulations implementing the FMP, or for which the impacts have not been evaluated in Council/NMFS documents in the context of current conditions. Following the framework procedures of Amendment 9 to the FMP, the Council will publicize, including by a Federal Register document, and solicit public comment on, any proposed new management measure. After a Council

meeting at which the measure is discussed, the Council will consider recommendations and prepare a Federal Register document summarizing the Council's deliberations, rationale, and analysis for the preferred action, and the time and place for any subsequent Council meeting(s) to consider the new measure. At subsequent public meeting(s), the Council will consider public comments and other information received to make a recommendation to the Regional Administrator about any new measure. NMFS may implement the Council's recommendation by rulemaking if approved by the Regional Administrator.

3.3.3.6 Bycatch Measures

At present there are no regulatory measures to reduce bycatch in crustacean fisheries occurring in the PRIA because there is no known bycatch occurring. Four types of non-regulatory measures aimed at reducing bycatch and bycatch mortality, and improving bycatch reporting are being implemented. They include: 1) outreach to fishermen and engagement of fishermen in management, including research and monitoring activities, to increase awareness of bycatch issues and to aid in development of bycatch reduction methods; 2) research into fishing gear and method modifications to reduce bycatch quantity and mortality; 3) research into the development of markets for discard species; and 4) improvement of data collection and analysis systems to better quantify bycatch.

3.3.3.7 Stock Status Determination Criteria

Specifications of OY and overfishing have not been determined for crustacean management unit species in the PRIA. However, should the Council determine that a stock status determination is needed, the Council will rely on the specification target and rebuilding control rules and reference points established for the NWHI lobster fishery until appropriate specifications are developed for crustacean fishery resources of the PRIA. The specifications would be applied to multi-species stock complexes or to individual species, depending on the information and stock assessment tools available.

3.3.3.8 Annual Catch Limit

At this time, the Council and NMFS do not specify an ACL for Crustacean MUS in EEZ waters around the PRIA. This is because current federal regulations implementing the PRIA FEP (78 FR 32996, June 3, 2013) prohibit commercial and non-commercial fishing within 12 nautical miles around each of the seven islands and atolls that comprise the PRIA, unless authorized the U.S. Fish and Wildlife Service under their respective authorities.

3.3.3.8.1 Specification Mechanism

Specification of the acceptable biological catch and annual catch limits are required by the MSA and follows the mechanism described in Appendix E. The specification will be done on an annual basis by NMFS based on recommendations from the Council.

3.3.3.8.2 Limit

There continues to be a functional equivalent of an ACL of zero for Crustacean MUS in the PRIA.

3.3.3.8.3 Accountability Measures

Accountability measures will be specified on an annual basis by NMFS based on recommendations by the Council. There is currently no in-season monitoring of crustacean catch in CNMI. The specification of accountability measures will follow the process described in Appendix E.

3.3.3.9 Yield

3.3.3.9.1 Maximum Sustainable Yield

There are no estimates available of MSY for crustaceans around the PRIA.

3.3.3.9.2 Optimal Yield

The OY is the percentage of the ACL that is caught by fishermen fishing in accordance with applicable fishery regulations in this FEP in the EEZ and adjacent waters of the Western Pacific Region.

3.3.3.9.3 Extent to Which Fishing Vessels will Harvest OY

Domestic vessels have sufficient harvesting capacity to catch the entire OY. Therefore, the TALFF is zero.

3.3.3.9.4 Extent to Which US Fish Processors will Process OY

If crustacean fisheries did develop within the PRIA, it would be likely certain that all specimens would be processed by US processors.

3.3.4 Spiny and Slipper Lobster and Kona Crab Essential Fish Habitat

Spiny lobsters are found throughout the Indo-Pacific region. All spiny lobsters in the Western Pacific Region belong to the family Palinuridae. The slipper lobsters belong to the closely related family, Scyllaridae. There are 13 species of the genus *Panulirus* distributed in the tropical and subtropical Pacific between 35° N and 35° S. *P. penicillatus* is the most widely distributed, the other three species are absent from the waters of many island nations of the region. The Hawaiian spiny lobster (*P. marginatus*) is endemic to Hawaii and Johnston Atoll.

In the southwestern Pacific, spiny lobsters are typically found in association with coral reefs. Coral reefs provide shelter as well as a diverse and abundant supply of food items. *Panulirus penicillatus* inhabits the rocky shelters in the windward surf zones of oceanic reefs and moves on to the reef flat at night to forage.

To reduce the complexity and the number of EFH identifications required for individual species and life stages, the Council has designated EFH for crustacean species assemblages. The species complex designations are spiny and slipper lobsters and Kona crab. The designation of these complexes is based on the ecological relationships among species and their preferred habitat.

At present, there is not enough data on the relative productivity of different habitats of CMUS to

develop EFH designations based on Level 3 or Level 4 data. There are little data concerning growth rates, reproductive potentials, and natural mortality rates at the various life history stages. The relationship between egg production, larval settlement, and stock recruitment is also poorly understood. The depth distribution of phyllosoma larvae of other species of *Panulirus* common in the Indo-Pacific region has been documented. Later stages of panulirid phyllosoma larvae have been found at depths between 80 and 120 meters.

3.3.4.1 Description and Identification of Spiny and Slipper Lobster and Kona Crab EFH

For these reasons, the Council designated EFH for spiny lobster larvae as the water column from the shoreline to the outer limit of the EEZ down to a depth of 150 meters throughout the Western Pacific Region. The EFH for juvenile and adult spiny lobster is designated as the bottom habitat from the shoreline to a depth of 100 meters throughout the Western Pacific Region.

3.3.4.2 Identification of Habitat Areas of Particular Concern

Currently, no crustacean HAPC has been designated in the PRIA. Research indicates that banks with summits less than 30 meters support successful recruitment of juvenile spiny lobster while those with summit deeper than 30 meters do not. For this reason, the Council has designated all banks in the NWHI with summits less than 30 meters as HAPC. The basis for designating these areas as HAPC is the ecological function they provide, the rarity of the habitat type, and the susceptibility of these areas to human-induced environmental degradation. The complex relationship between recruitment sources and sinks of spiny lobsters is poorly understood. The Council feels that in the absence of a better understanding of these relationships, the adoption of a precautionary approach to protect and conserve habitat is warranted.

The relatively long pelagic larval phase for palinurids results in very wide dispersal of spiny lobster larvae. Palinurid larvae are transported up to 2,000 nautical miles by prevailing ocean currents. Because phyllosoma larvae are transported by the prevailing ocean currents outside of EEZ waters, the Council has identified habitat in these areas as "important habitat." To date HAPC has not been identified or designated for deepwater shrimp.

3.3.5 Deepwater Shrimp Essential Fish Habitat

Shrimp trapping surveys conducted at 22 islands and banks between 1982 and 1984 reported the presence of all eight species of *Heterocarpus: Heterocarpus ensifer, H. laevigatus* and *H. longirostris* comprised 99 percent of the catch while *H. tricarinatus, H. gibbosus* and *H. sibogae* were rare (Moffitt and Polovina 1987). Maximum depths according to Moffitt and Polovina are *H. ensifer* 366 m, *H. laevigatus* 777 m, and *H. longirostris* 1052 m. Similar depth ranges were reported for *H. ensifer* and *H. laevigatus* in Guam (Wilder 1977).

To reduce the complexity and the number of EFH identifications required for each individual species and life stages of the genus *Heterocarpus* in the Western Pacific Region, and based upon the above information, the Council has recommended EFH for the complete assemblage of adult and juvenile *Heterocarpus* spp. as the outer reef slopes between 300 and 700 meters surrounding every island and submerged banks in the Western Pacific Region.

The species complex designations includes all eight species of deepwater shrimp extant in the Western Pacific Region (*Heterocarpus ensifer, H. laevigatus, H. sibogae, H. gibbosus, H.*

Lepidus, H. dorsalis, H. tricarinatus and H. longirostris). This designation is consistent with the Code of Federal Regulations (CFR) §600.815 (a)(1)(iv)(E).

At present, there are not enough data on the relative productivity of different habitats of *Heterocarpus* to develop EFH designations based on Level 3 (growth, reproduction and survival rates by habitat area) or Level 4 (production rates by habitat) data. In fact, there are little to no data available concerning growth rates, reproductive potentials and natural mortality rates at each life history stage.

3.3.5.1 Description and Identification of EFH

The relationship between egg production, larval settlement and stock recruitment is also poorly understood and only available for a few specific sites (Wilder 1977; Clarke 1972; Moffitt and Polovina 1987). Mature shrimps may undergo a depth related seasonal migration in synchrony with reproduction and a shift into deeper waters from depths of about 550 meters to 700 meters. For these reasons the Council has designated EFH for deepwater shrimp eggs and larvae as the water column and associated outer reef slopes between 550 m and 700m, and the EFH for juveniles and adults is designated as the outer reef slopes at depths between 300-700 m.

3.3.5.2 Identification of Habitat Areas of Particular Concern

At this time there are no identified HAPC for deepwater shrimp.

3.4 Precious Corals

3.4.1 Description of the Fishery

No harvester has received a Federal permit to harvest precious corals from the EEZ surrounding the PRIA since the implementation of the Precious Corals FMP in 1980. However, this does not preclude any future permit issuance. Little is known about the existence or extent of precious coral beds in the EEZ waters around the PRIA More information is available regarding precious coral fisheries in the Hawaii Archipelago Fishery Ecosystem Plan, which is available on the Council's website.

3.4.1.1 Type and Quantity of Fishing Gear

Fishing gear used to harvest precious coral include submersible and hand harvest.

3.4.1.2 Catch in Number or Weight

There are no harvests of precious corals in the PRIA.

3.4.1.3 Economics

There is no information on the economics of a potential PRIA precious coral fishery.

3.4.1.4 Present and Probable Future Condition of the Fishery

Any precious coral species and beds that exist in the PRIA are assumed to be in a healthy condition at present and are predicted to remain healthy.

3.4.2 Precious Coral Management Unit Species

Table 10. Precious Coral Management Unit Species.

Scientific Name	English Common Name
Corallium secundum	pink coral (also called red coral)
Corallium regale	pink coral (also called red coral)
Corallium laauense	pink coral (also called red coral)
Gerardia spp.	gold coral
Narella spp.	gold coral
Lepidisis olapa	bamboo coral
Antipathes dichotoma	black coral
Antipathes grandis	black coral
Antipathes ulex	black coral

3.4.3 MSA Conservation and Management Measures

3.4.3.1 Management Area

The U.S. EEZ surrounding the PRIA has been defined, for the purposes of precious coral fisheries management, as an Exploratory Precious Coral Permit Area.

The following U.S. EEZ waters are no-take MPAs: Landward of the 50 fathom curve at Jarvis, Howland, and Baker Islands, and Kingman Reef; as depicted on National Ocean Survey Chart Numbers 83116 and 83153.

In addition, all fishing is prohibited within 12 nm of the islands in the Pacific Remote Islands Monument, subject to U.S. Fish and Wildlife Service authority to allow non-commercial fishing in consultation with NMFS and the Council. All commercial fishing is prohibited within the PRIMNM.

3.4.3.2 Permits and Reporting

In order to identify participants and to collect harvest and effort data, Federal permits and reporting are required for any vessel of the United States fishing for, taking or retaining precious corals in EEZ waters around the PRIA. Each permit will be valid for fishing only in the permit area. No more than one permit will be valid for any one person at any one time. The holder of a

valid permit to fish one permit area may obtain a permit to fish another permit area only upon surrendering to the NMFS Regional Administrator any current permit for the precious corals fishery. Fishery participants have the option of using NMFS approved electronic logbooks in lieu of paper logbooks.

3.4.3.3 Seasons and Quotas

The fishing year for precious corals begins on July 1 and ends on June 30 the following year. The quota limiting the amount of precious corals that may be taken in any precious corals permit area in EEZ waters around the PRIA during a fishing year is 1,000 kg, all species combined (except black corals).

Quotas limit the amount of precious corals that may be taken in any precious corals permit area during the fishing year. Only live coral is counted toward the quota. Live coral means any precious coral that has live coral polyps or tissue.

The quotas for exploratory areas will be held in reserve for harvest by vessels of the United States.

3.4.3.3.1 Closures

If the NMFS Regional Administrator determines that the harvest quota for any exploratory area will be reached prior to the end of the fishing year NMFS will issue a Federal Register notice closing the bed and the public will be informed through appropriate news media. Any such field order must indicate the reason for the closure, delineate the bed being closed, and identify the effective date of the closure. A closure is also effective for a permit holder upon the permit holder's actual harvest of the applicable quota.

3.4.3.4 Restrictions

Size Restrictions--The height of a live coral specimen shall be determined by a straight line measurement taken from its base to its most distal extremity. The stem diameter of a living coral specimen shall be determined by measuring the greatest diameter of the stem at a point no less than one inch (2.54 cm) from the top surface of the living holdfast. Live pink coral harvested from any precious corals permit area must have attained a minimum height of 10 inches (25.4 cm). Live black coral harvested from any precious corals permit area must have attained either a minimum stem diameter of 1 inch (2.54 cm), or a minimum height of 48 inches (122 cm). An exemption permitting a person to hand-harvest from any precious corals permit area black coral which has attained a minimum base diameter of 3/4 inches (1.91 cm), measured on the widest portion of the skeleton at a location 1 inch above the holdfast, will be issued to a person who reported a landing of black coral to the State of Hawaii within 5 years before the effective date of the final rule. A person seeking an exemption under this section must submit a letter requesting an exemption to the NMFS Pacific Islands Area Office.

Gear Restrictions-- To protect habitat and reduce bycatch, only selective gear may be used to harvest coral from any precious corals permit area. Selective gear means any gear used for harvesting corals that can discriminate or differentiate between type, size, quality, or characteristics of living or dead corals.

Gold Coral Harvest Moratorium-- To prevent overfishing and stimulate research on gold corals, fishing for, taking, or retaining any gold coral (live and dead) in any precious coral permit area is prohibited through June 30, 2013. This includes all EEZ waters of the Western Pacific Region. Additional research results on gold coral age structures, growth rates, and correlations between length and age will be considered by the Council and NMFS prior to the expiration of the 5-year moratorium.

3.4.3.5 At-sea Observer coverage

[need to identify]

3.4.3.6 Framework Procedures

Established management measures may be revised and new management measures may be established and/or revised through rulemaking if new information demonstrates that there are biological, social, or economic concerns in a precious corals permit area. By June 30 of each year, the Council-appointed Precious Corals Plan Team will prepare an annual report on the fishery in the management area. The report will contain, among other things, recommendations for Council action and an assessment of the urgency and effects of such action(s). Established measures are management measures that, at some time, have been included in regulations implementing the FEP, and for which the impacts have been evaluated in Council/NMFS documents in the context of current conditions. According to the framework procedures of Amendment 3 to the former Precious Corals FMP, the Council may recommend to the Regional Administrator that established measures be modified, removed, or re-instituted. Such recommendation will include supporting rationale and analysis and will be made after advance public notice, public discussion, and consideration of public comment. NMFS may implement the Council's recommendation by rulemaking if approved by the Regional Administrator.

New measures are management measures that have not been included in regulations implementing the FEP, or for which the impacts have not been evaluated in Council/NMFS documents in the context of current conditions. Following the framework procedures of Amendment 3 to the Precious Corals FMP, the Council will publicize, including by a Federal Register document, and solicit public comment on, any proposed new management measure. After a Council meeting at which the measure is discussed, the Council will consider recommendations and prepare a Federal Register document summarizing the Council's deliberations, rationale, and analysis for the preferred action and the time and place for any subsequent Council meeting(s) to consider the new measure. At a subsequent public meeting, the Council will consider public comments and other information received before making a recommendation to the Regional Administrator about any new measure. If approved by the Regional Administrator, NMFS may implement the Council's recommendation by rulemaking.

3.4.3.7 Bycatch Measures

To reduce the potential for bycatch, only selective gear can be used to harvest precious corals in the Western Pacific Region. In addition, four types of non-regulatory measures aimed at reducing bycatch and bycatch mortality, and improving bycatch reporting are being implemented. They include: 1) outreach to fishermen and engagement of fishermen in management, including research and monitoring activities, to increase awareness of bycatch

issues and to aid in development of bycatch reduction methods; 2) research into fishing gear and method modifications to reduce bycatch quantity and mortality; 3) research into the development of markets for discard species; and 4) improvement of data collection and analysis systems to better quantify bycatch. Because any future harvesting would only be allowed by selective gear (i.e with submersibles or by hand) no bycatch would be expected in the PRIA. In addition, any fishing vessel (commercial or non-commercial) operating in the territorial seas or EEZ of the U.S. in a fishery identified through NMFS' annual determination process must carry an observer when directed to do so.

3.4.3.8 Stock Status Determination Criteria

Due to the paucity of information on the existence and distribution of precious corals, and the absence of a precious coral fishery in the PRIA, specification of MSY, OY and overfishing have not been specifically determined for precious coral management unit species in the PRIA. However, as a precautionary approach, a quota for precious corals in the Exploratory Precious Coral Permit Area (which includes the PRIA) has been set at 1,000 kg/year. Should a precious coral fishery develop in the PRIA, the Council may develop specifications for specific coral beds depending on the information and stock assessment tools available.

Measures to address overfishing

To date no stocks of precious corals have been determined to be overfished or that overfishing is occurring. Provisions of the Precious Corals FMP, as amended, are sufficient to prevent overfishing and these measures will be carried over into the FEP. Precious coral beds are classified as Established (with fairly accurate estimated harvest levels), Conditional (with extrapolated MSY estimates) or Refugia (reproductive reserves or baseline areas). Exploratory Areas are grounds available for exploratory harvesting with an Exploratory Permit.

3.4.3.9 Annual Catch Limit

At this time, the Council and NMFS do not specify an ACL for Precious Coral MUS in EEZ waters around the PRIA. This is because current federal regulations implementing the PRIA FEP (78 FR 32996, June 3, 2013) prohibit commercial and non-commercial fishing within 12 nautical miles around each of the seven islands and atolls that comprise the PRIA, unless authorized the U.S. Fish and Wildlife Service under their respective authorities.

3.4.3.9.1 Specification Mechanism

Specification of the acceptable biological catch and annual catch limits are required by the MSA and follows the mechanism described in Appendix E. The specification will be done on an annual basis by NMFS based on recommendations from the Council.

3.4.3.9.2 Limit

There continues to be a functional equivalent of an ACL of zero for Precious Coral MUS in the PRIA.

3.4.3.9.3 Accountability Measures

Accountability measures will be specified on an annual basis by NMFS based on recommendations by the Council. There is currently no in-season monitoring of crustacean catch in CNMI. The specification of accountability measures will follow the process described in

Appendix E.

3.4.3.10 Yield

3.4.3.10.1 Maximum Sustainable Yield

There are no estimates available of MSY for precious corals around the PRIA.

3.4.3.10.2 Optimal Yield

The OY is the percentage of the ACL that is caught by fishermen fishing in accordance with applicable fishery regulations in this FEP in the EEZ and adjacent waters of the Western Pacific Region.

3.4.3.10.3 Extent to Which Fishing Vessels will Harvest OY

Domestic vessels have sufficient harvesting capacity to catch the entire OY. Therefore, the TALFF is zero.

3.4.3.10.4 Extent to Which US Fish Processors will Process OY

If precious coral fisheries did develop within the PRIA, it would be likely certain that all specimens would be processed by US processors.

3.4.3.11 Regulations Implementing International Recommendations and other Applicable Laws

As a signatory to the Convention on International Trade in Endangered Species (CITES), the United States is required to abide by regulations include in this international agreement. CITES includes regulations on international trade of endangered species through import and export permits. Currently, Black Coral is listed as an Appendix II species, which requires an export permit for international commercial trade. Corallium (Red/Pink corals) continues to be proposed as an Appendix II species and may end up on the list in the near future.

3.4.3.12 Bycatch

Precious corals resources are not currently harvested in PRIA waters. Therefore, there is no reported bycatch associated with this fishery. Should a fishery develop, only selective gear would be permitted (i.e with submersibles or by hand). Precious coral fisheries in Hawaii have no bycatch and none would be expected in the PRIA.

3.4.4 Precious Corals Essential Fish Habitat

In the Hawaiian Islands, precious coral beds have been found only in the deep interisland channels and off promontories at depths between 300 and 1,500 meters and 30 and 100 meters. The six known beds of pink, gold, and bamboo corals in the Western Pacific Region are Keahole Point, Makapuu, Kaena Point, Wespac, Brooks Bank, and 180 Fathom Bank. Makapuu is the only bed that has been surveyed accurately enough to estimate MSY. The Wespac bed, located between Necker and Nihoa Islands in the NWHI, has been set aside for use in baseline studies and as a possible reproductive reserve. The harvesting of precious corals is prohibited in this area. Within the Western Pacific Region, the only directed fishery for precious corals has

occurred in the Hawaiian Islands. At present, there is no commercial harvesting of precious corals in the EEZ, but several firms have expressed interest.

Precious corals may be divided into deep- and shallow-water species. Deep-water precious corals are generally found between 350 and 1,500 meters and include pink coral (*Corallium secundum*), gold coral (*Gerardia* sp. and *Parazoanthus* sp.), and bamboo coral (*Lepididistis olapa*). Shallow-water species occur between 30 and 100 meters and consist primarily of three species of black coral: *Antipathes dichotoma*, *Antipathes grandis*, and *Antipathes ulex*. In Hawaii, *Antipathes dichotoma* accounts for around 90 percent of the commercial harvest of black coral, and virtually all of it is harvested in state waters.

Precious corals are non–reef building and inhabit depth zones below the euphotic zone. They are found on solid substrate in areas that are swept relatively clean by moderate-to-strong (> 25 cm/sec) bottom currents. Strong currents help prevent the accumulation of sediments, which would smother young coral colonies and prevent settlement of new larvae. Precious coral yields tend to be higher in areas of shell sandstone, limestone, and basaltic or metamorphic rock with a limestone veneer.

Pink, bamboo, and gold corals all have planktonic larval stages and sessile adult stages. Larvae settle on solid substrate where they form colonial branching colonies. The length of the larval stage of all species of precious corals is unknown.

The habitat sustaining precious corals is generally in pristine condition. There are no known areas that have sustained damage due to resource exploitation, notwithstanding the alleged illegal heavy foreign fishing for corals in the Hancock Seamounts area.

To reduce the complexity and the number of EFH identifications required for individual species and life stages, the Council designated EFH for precious coral assemblages. The species complex designations are deep- and shallow-water complexes. The designation of these complexes is based on the ecological relationships among the individual species and their preferred habitat.

3.4.4.1 Description and Identification of EFH

The Council considered using the known depth range of individual PCMUS to designate EFH, but rejected this alternative because of the rarity of the occurrence of suitable habitat conditions. Instead, the Council designated the six known beds of precious corals as EFH. The Council believes that the narrow EFH designation will facilitate the consultation process.

3.4.4.2 Identification of Habitat Areas of Particular Concern

Currently, no precious coral HAPC has been designated in the PRIA.

3.5 Pelagic Fisheries

This section provides some limited information on pelagic fishing and fisheries that occur in the PRIA areas. However, this management plan does not regulate these fisheries. See the Council's Pacific Pelagic FEP for applicable conservation and management measures applicable to pelagic fisheries of the Western Pacific Region.

There is a long history of commercial fishing for pelagic species in the PRIA. For example, the Hawaii longline fishery historically operated in the Johnston Atoll prior to the expansion of the PRIMNM. The Hawaii longline fishery continues to operate in the EEZ around Palmyra at small percentage of its total fishing effort (Figure 4 and Figure 5).

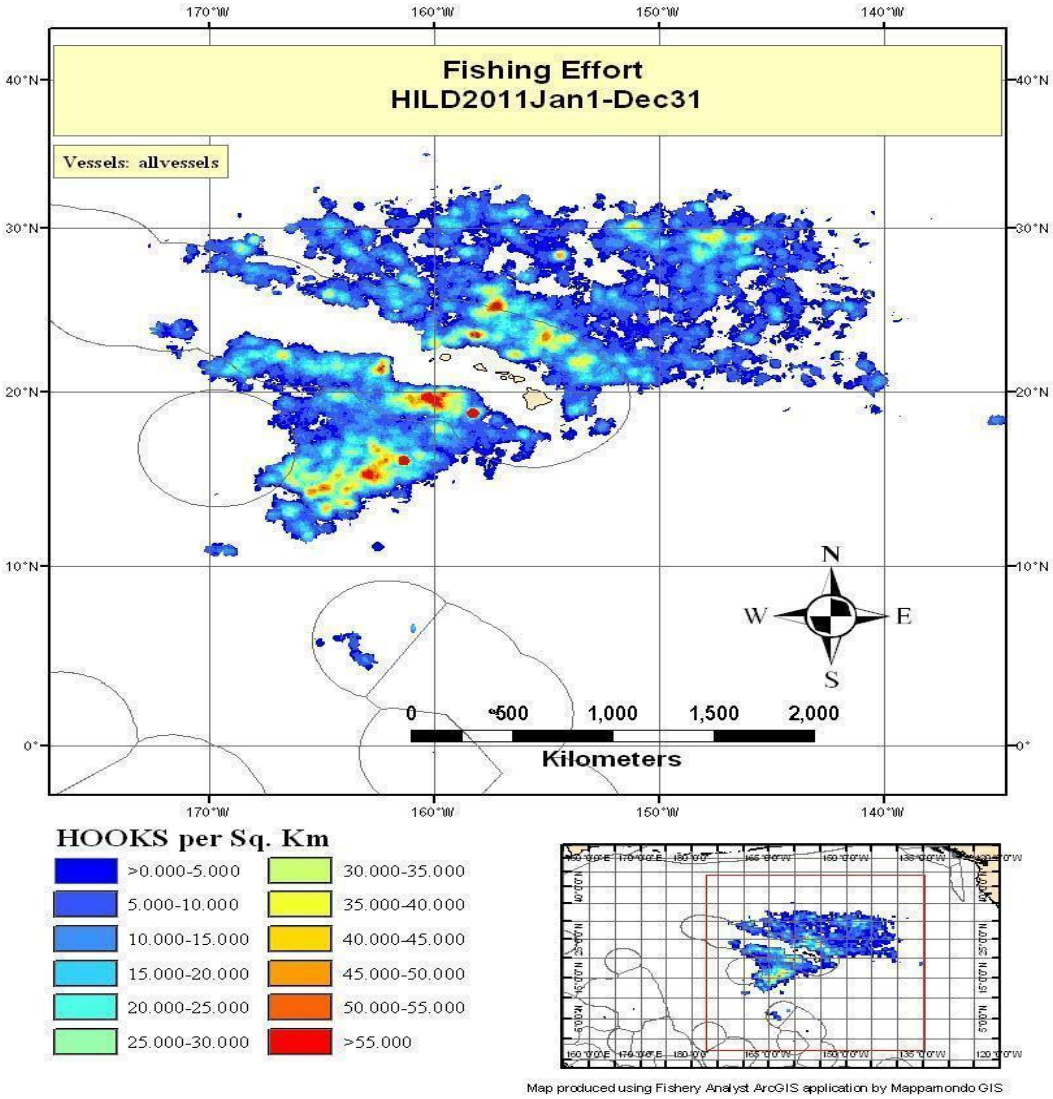

Figure 4. Hawaii Longline Fishing Effort in 2011.

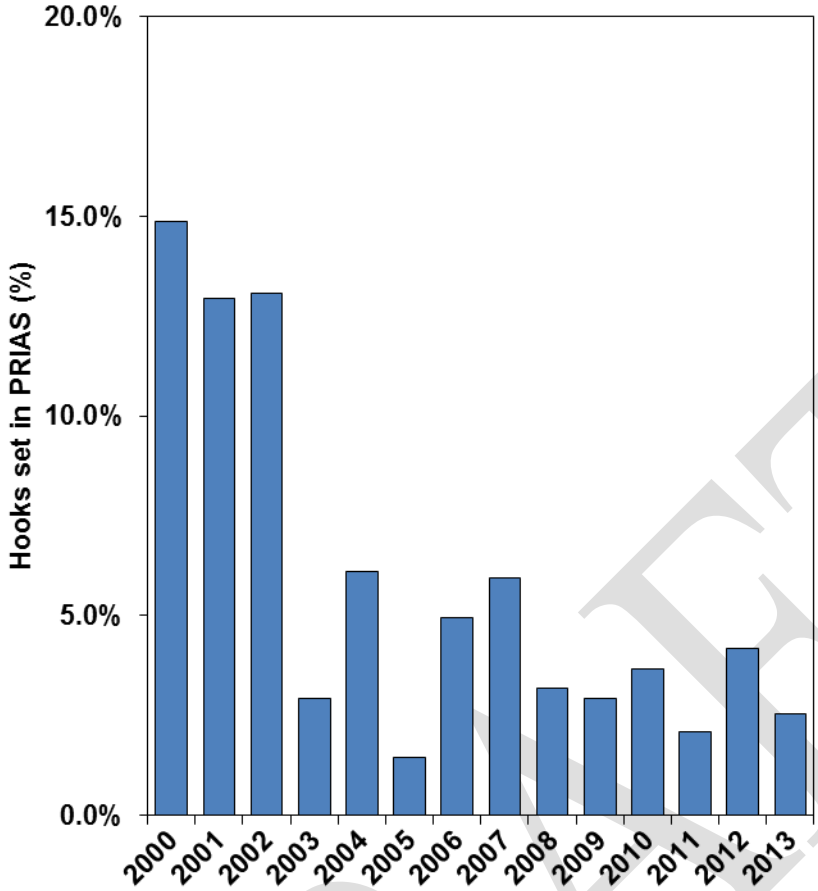

Figure 5: Percentage of Hawaii longline fleet hooks set in the PRIAs, 2000-2013.

The US purse seine fishery also operates in the PRIA; however the PRIMNM expansion removed opportunities to fish in the EEZ around Jarvis Island. The areas eastward of 50 nm from Howland and Baker Islands is available to purse seine fishing by US vessels, however, subject to annual limits on fishing effort.

3.6 Other Considerations Important for FEP Implementation

3.6.1 Sociocultural Data

The MSA states the "Pacific Insular Areas contain unique historical, cultural, legal, political, and geographical circumstances which make fisheries resources important in sustaining their economic growth." In addition, ecosystem-based fishery management recognizes and attempts to manage for the interconnectedness of biological, ecological, geological, and social management dimensions. For many in islands communities, a fishery is *social system* that includes fish as well as fishermen, their families and friends, and, in the case of more commercialized fisheries, the associated support infrastructure and industry. Even those who buy and eat fish on a regular basis might be thought of as being part of a fishery.

Because of the importance of managing fishery resources as public trust, and because of the cultural uniqueness of the Pacific Islands, the Council has established several elements in its

management process to incorporate science-based social data and traditional ecological knowledge. In fact, the Council from its inception has been very sensitive to traditional and indigenous fishing issues and considerations. These issues include ensuring fishermen participation in setting ACLs, preserving indigenous way of life, navigating the relationship between federal processes and requirements and local custom and norms, and the dependence, on nearshore and pelagic resource, even in the modern era.

These process elements include formal social science input science the late 1980s via social science recommendations to the newly-established Pelagic Fisheries Research Program, and SSC subcommittee on social science, and a Council Cultural and Social Science Research Plan. In 1988, the Council spearheaded a request for proposals focused on native fishery rights issues and was instrumental in getting a Western Pacific Community Development Program and Plan included in 1996 reauthorization of the MSA. Following and in response to that, the Council established a Community Development Planning Committee. This committee is utilized under this FEP to assist with addressing increasing traditional and local knowledge in decision-making.

Between 1999-2002, the Council worked to have the Secretary of Commerce formally designate fishing communities in American Samoa, the CNMI, Guam, and Hawaii under the MSA's fishing communities provision (National Standard 8). To date, ours is the only region that has done so. In 2002, the Council established a formal Social Science Research and Planning Committee (known now as the Social Science Committee). Among other things, this Committee vets social science information needs as part of the Council's identification of fishery research priorities.

Finally, the Council works to address sociocultural considerations via its "SEEM" process and its annual fishery (SAFE) reports. The SEEM assessment quantifies social, economic, and ecological factors, as well as management uncertainty dimensions and SEEM working groups thus recommend whether the ACL is set equal or lower than the ABC based on these considerations. The Council's annual/SAFE report was overhauled in 2015 to monitor a host of social variables.

The Western Pacific Regional Fishery Management Council is the only regional fishery management council that employs both an Indigenous Coordinator and a Social Scientist.

3.6.2 Protected Species Information

Fisheries managed under this FEP have limited impacts to protected species, and no specific regulations are in place to mitigate protected species interactions. Destructive gear such as bottom trawls, bottom gillnets, explosives and poisons are prohibited under this FEP, and these provide benefit to protected species by preventing potential interactions with non-selective fishing gear.

NMFS has determined that the fisheries operating under the Pacific Remote Islands Area FEP are not likely to adversely affect ESA-listed sea turtles, marine mammals, and scalloped hammerhead shark, and have no effects on ESA-listed reef-building corals. The current list of ESA Section 7 consultations applicable to this FEP are listed in the Annual Pelagic Fishery Ecosystem Report (SAFE Report). NMFS will reinitiate consultation if a new species is listed or

critical habitat is designated that may be affected by FEP fisheries.

3.6.3 Climate Change

Changing climate is already adversely impacting island communities, ecosystems, resources, cultures and economies. Increasing pressures on valuable marine and coastal habitats and resources due to changing demands for food, energy, economic growth and community sustainability make climate change an issue of community, national and regional security. In addition to economic considerations such as commercial fisheries, Pacific Island communities must address threats to culturally important species and places as well as community health and food security. Ultimately, for many low-lying coral atoll nations, climate change is a direct threat to national security as rising sea level and changes in the availability of freshwater may make at least some of those nations uninhabitable. To escape these impacts, human migration is anticipated.

The *Executive Summary of the 2012 Pacific Islands Regional Climate Assessment* (PIRCA) notes that the indicators of climate change suggest multiple concerns for human and natural communities in the Pacific Islands region: decreased freshwater supplies, especially on atolls and low-lying islands; increased coastal flooding and erosion; increased coral bleaching; unknown, negative consequences for the entire marine ecosystem; declines in open-ocean fisheries; increased risk of species extinctions; threats to the traditional lifestyles of indigenous communities making it difficult for Pacific Island communities to sustain their connection with a defined place and their unique set of customs, beliefs, and languages; and human migration from low islands to high islands and continental sites.

At its 157th meeting in June 2013, the Council restructured its Coastal and Marine Spatial Planning (CMSP) Committee into a Marine Planning and Climate Change (MPCC) Committee. The MPCC Committee advises the Council on new and developing research and happenings related to marine planning and climate change as it relates to Western Pacific fisheries, provides input on Council actions and associated analyses and documents as it relates to marine planning and climate change, and recommends research and program priorities, including outreach and education, to address marine planning and impacts of climate change in fisheries and fishing communities. The Committee includes up to 20 members, including at least three representatives each from Hawaii, American Samoa, Guam and the Commonwealth of the Northern Mariana Islands (one of the three is a community representative), three members representing the federal government and an ecosystem modeler. The basic criteria for Committee membership is expertise and interest in marine planning and climate change, with a focus on fisheries and fishing communities. Members of the Committee are selected by the Council and serve three-year terms.

In 2015, the Council adopted the MPCC Policy and action plan drafted by the MPCC Committee. The definition of climate change included in the MPCC Policy is the one used by the Intergovernmental Panel on Climate Change, which includes natural climate variability such as El Nino Southern Oscillation and other patterns of natural variability as well as long-term changes in climate associated with anthropogenic (human) influence on greenhouse gases and other aspects of the Earth's climate system. The definition of climate change in the Council's MPCC policy also includes ocean acidification. The MPCC policy notes that, in the Pacific

Ocean, anticipated climate change impacts include ocean acidification; changing migratory patterns of tuna, other commercially valuable stocks and protected species, among other species; changes in coastal and marine habitats with associated changes in socially, culturally and economically valuable coastal fisheries and other sources of ocean economy; changing patterns of El Niño and other patterns of climate variability; changes in water level including, but not limited to sea level change, increased severity of extreme weather, coral reef changes; and human migration, among others. The MPCC policy recognizes a set of overarching and specific principles and specific policy points for the Council, its advisory bodies and its staff to consider and incorporate in the PRIA FEP as well as in Council programs and other actions. The policy can be found on the Council's website.

The Council's MPCC Action Plan prioritizes and provides guidance on implementing climate change measures adopted by the Council, including items related to climate change research and data needs.

A working group of the MPCC Committee, with additional support from PIFSC, tentatively identified climate indicators to monitor initially for the annual reports on the Council's FEPs. The working group suggested that, rather than focusing on the numeric changes and/or stability of these factors, the annual reports indicate whether the monitored indicators are in a green, yellow or red condition. The working group also suggested that the annual reports eventually also monitor climate change *impact* indicators, such as *socioeconomic indicators*, to be determined after community consultation. The Council's 2015 restructured Plan Team includes climate change experts who will finalize decisions related to the monitoring of climate indicators and climate impact indicators to be included in the PRIA FEP annual report. To identify the climate change impact indicators to be monitored in the PRIAs, the Council intends to work with community members, schools, policymakers and others in Hawaii, American Samoa, Guam and the CNMI.

3.6.4 Marine Planning

In the PRIAs, fisheries compete with other activities for fishing grounds and access to them. These activities include, but are not limited to, military bases and training activities, marine protected areas, recreational activities and pollution.

Marine planning is a tool utilized regionally, nationally and globally to identify and address issues of multiple human uses, ecosystem health and cumulative impacts and is a component of the National Ocean Policy. Since 2010, CMSP has been the focus of several of the Council's advisory body meetings and outreach activities. During this time, the Council also began transforming its Marine Protected Area Committee first into a CMSP Committee and then into the current Marine Planning and Climate Change Committee (see above for details on the Committee).

In 2015, the Western Pacific Regional Fishery Management Council adopted its MPCC Policy, which was drafted by the Council's MPCC Committee. The policy uses the definition of marine planning as defined in the National Ocean Policy Implementation Plan. The MPCC policy recognizes a set of overarching and specific principles and specific policy points for the Council,

its advisory bodies and its staff to consider and incorporate in the PRIAs FEP as well as in Council programs and other actions. The policy notes that marine planning can be used to determine ocean management priorities across jurisdictions and identify common objectives. The MPCC Policy recognizes that traditional resource management systems, such as the `Aha Moku in Hawaii, can provide an appropriate context for marine planning. A key component of the policy is collaboration with existing organizations in data and information collection, dissemination and outreach. The Council intends to work with the Pacific Islands Regional Planning Body, community members, the private-sector, schools, policymakers and others in Hawaii, American Samoa, Guam and the CNMI. The MPCC Policy can be found on the Council's website.

The Council's Plan Team (restructured in 2015) includes a marine planning expert, and a section on marine planning will be included in the Annual Report.

3.6.5 Aquaculture

Aquaculture is a growing industry in the U.S. producing an ever-increasing proportion of marine consumer products once solely harvested from the wild. NMFS defines aquaculture as the as the propagation and rearing of aquatic organisms for any commercial, recreational, or public purpose. In the Pacific it has evolved into a multi-million dollar industry producing a range of marine products including algae, pearls, and fish. In the twentieth century, most aquaculture in the U.S. was conducted at land-based facilities and was focused on freshwater species. Technical innovations, declines in wild marine stocks, and greater demand for seafood have led to a recent expansion of the industry into marine environments.

The Council and NMFS is responsible for managing fisheries in federal water and NOAA has determined that aquaculture is included in the definition of "fishing" under the Magnuson-Stevens Fishery Conservation and Management Act (MSA)[1]. This designation provides the statutory authority for NMFS and the regional fishery management councils (FMCs) to regulate aquaculture projects in federal waters. NMFS and the FMCs are just beginning to establish management plans for aquaculture activities. In 2009, The Gulf of Mexico FMC established the first fishery management plan for offshore aquaculture. That same year, the Council voted to consider including management measures for offshore aquaculture in the FEPs at its 146th Meeting in October 2009.

The WPRFMC defines aquaculture as the raising and cultivation of plants or animals, both freshwater and marine, for food or other purposes. Aquaculture, as defined by the Council, includes fish farming, fish culturing, ocean ranching, and mariculture. The Council recognizes that aquaculture is a rapidly developing industry in the Western Pacific Region as well as the rest of the world, and that aquaculture presents both potential benefits and potential negative impacts to the environment and society. The Council's Aquaculture Policy can be found at the Council's website, www.wpcouncil.org.

Currently, there are no offshore aquaculture projects in waters around the PRIA.

3.6.6 Fishing Rights of Indigenous People

The WPRFMC addresses the economic and social consequences of militarization, colonization and immigration on the aboriginal people in the Council's area of responsibility and authority through its FEPs. Generally, the resultant cultural hegemony has manifested in poverty, unemployment, social disruption, poor education, poor housing, loss of traditional and cultural practices, and health problems for indigenous communities. These social disorders affect island society. Rapid changes in the patterns of environmental utilization are disruptive to ecological systems that developed over millennia into a state of equilibrium with traditional native cultural practices. The environmental degradation and social disorder impacts the larger community by reducing the quality of life for all island residents. The result is stratification along social and economic lines and conflict within the greater community.

The primary process for the indigenous community to formally participate in the Council process is through their participation in the Advisory Panel discussions. Grant workshops and other Council public fora provide additional opportunity for the indigenous community to participate in the Council process. The Council has sponsored the Hoohanohano I Na Kupuna (Honoring our Ancestors) conference series in partnership with the Association of Hawaiian Civic Clubs (AOHCC) and in consultation with the native Hawaiian community. The conference received the support of the Kamehameha Schools/Bishop Estate, Office of Hawaiian Affairs, various departments of the State of Hawaii, the Hawaii Tourism Authority and numerous community organizations and projects throughout the State of Hawaii. Fishery ecosystem management provides the Council with the opportunity to utilize the *manao* (thoughts) and *ike* (knowledge) of our *kupuna* (elders) – ideas and practices that have sustained *na kanaka maoli* (native Hawaiian) culture for millennia.

The conference series was initiated by the Council to engage the Kanaka Maoli community in the development of the Hawaii Archipelago FEP and to increase their participation in the management of fisheries under the FEP's authority. A series of workshops with the Kanaka Maoli community to promote the concept of ahupuaa (traditional natural resource unit) management began in 2003 through the AOHCC. This endeavor was continued by the Council in order to take the ahupuaa concept to the next level, the development of a process to implement traditional resource management practices into today's management measures.

Under the Hawaii Archipelago FEP, this conference series will continue in Hawaii and will subsequently be extended to the other areas of the Western Pacific Region. Although the specific format will be tailored to each area's cultures and communities, in all cases the Council will seek to increase the participation of indigenous communities in the harvest, research, conservation and management of marine resources as called for in Section 305 of the MSA.

There are two programs specifically mandated by the MSA for these communities to participate in the Council process: the Western Pacific Community Development Program and the Western Pacific Community Demonstration Project Program.

3.6.6.1 Western Pacific Community Development Program

The Western Pacific Regional Fishery Management Council (Council), since its inception, has continuously worked on issues related to indigenous fishing rights for Pacific Islanders. In 1996,

amendments to the Magnuson-Stevens Fishery Conservation and Management Act recognized special fishing practices for native peoples in American Samoa, Guam, Hawaii and the Northern Mariana Islands in part through establishment of the Western Pacific Community Development Program (CDP). The CDP was further defined in the 2006 reauthorization of the MSA (MSRA). In developing the criteria for eligible communities provisions of the MSRA mandate that the Council shall base the critieria on "traditional fishing practices in or dependence on the fishery, the cultural and social framework relevant to the fishery, and economic barriers to access to the fishery."

The CDP was established with broad latitude in program development and implementation. The Western Pacific CDP provides flexibility in the method by which benefits can be delivered to indigenous communities. Because of the program's flexibility, different implementing approaches have been used to date. There is potential for a broad variety of community initiatives to come forward for consideration under the CDP, therefore, to facilitate the process the Council seeks to establish a standard procedure to receive, review, approve and implement future CDP initiatives. In addition, CDP initiatives may include the need to provide access to fisheries which would otherwise be restricted.

A community is eligible to participate in a western Pacific community development program and submit a Project proposal if they meet criteria developed by the WPRFMC and approved by the Secretary. The criteria and regulations for the CDP can be found in Appendix D.

3.6.6.2 Western Pacific Community Demonstration Project Program

The Community Demonstration Project Program (CDPP) is a grant program. The Council has an advisory panel which reviews and ranks proposals and forwards to the Council for approval and transmittal to the Secretary of Commerce.

The purpose of the Western Pacific Demonstration Project Program is to promote the involvement of western Pacific communities in fisheries by demonstrating the application and/or adaptation of methods and concepts derived from traditional indigenous practices. Projects may demonstrate the applicability and feasibility of traditional indigenous marine conservation and fishing practices; develop or enhance community-based opportunities to participate in fisheries; involve research, community education, or the acquisition of materials and equipment necessary to carry out a demonstration project.

To support this program, region wide grant application trainings and workshops are conducted by the Council. These workshops also provide a forum for the community to make recommendations and participate in the Council process. The Council develops the funding priorities.

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4 MANAGEMENT PROCESS

4.1 Council Process

4.1.1 Overview of Council Process

The Council process to develop or change regulations involves many stages and includes many steps and opportunities for public input and comment. The Council considers proposals, options papers, draft amendment documents, National Environmental Policy Act analysis documents, and eventually votes on preferred alternatives, which may result in regulations at the end of the process.

The Council generally follows this process:

- An issue is brought to the Council's attention – presented from the public, an advisory body, or other avenue;
- The Council reviews the issue and decides whether to initiate an analysis of alternatives;
- If such an analysis is initiated, then:
    - Council staff develops alternatives, analysis and other needed documents for review;
    - There is a review by the Council, its advisory bodies and the public; and
    - The Council may select a preferred alternative, initiate further analysis or decide on no further action.
- After a preferred alternative is selected, the Council decision is forwarded to the Secretary of Commerce in the form of a plan or amendment for review and approval; The Secretary of Commerce may do either of the following:
    - Reject the plan/amendment;
    - Approve the plan/amendment;
    - Partially approve the plan/amendment.
- If the plan/amendment is approved, draft rules are published for public comment;
- After the rules are noticed and comments are addressed, a final decision is made by the Secretary of Commerce; and
- If approved, the rules and regulations from the plan/amendment are implemented through the Code of Federal Regulations.
- If the plan/amendment is rejected or partially approved, it is returned to the Council, with rationale for rejection/partial approval, for the Council's consideration.

4.1.1.1 Development and Approval Process for Management Actions

The MSA and OALs set forth specific analytical and procedural requirements that interact with NMFS' and Councils decision-making processes under the MSA. Mandates placed on NMFS, as the federal action agency, are distinct from the requirements pertaining to the activities of the Council, in their role as an advisory body. The Council is not precluded from developing analyses and documentation to support compliance with the OALs; in fact, this practice is recommended. However, legal responsibility for most requirements lies with the NMFS. The Council desires to have as complete analysis and documentation as possible available during its deliberations.

a. MSA Role of the Councils

As set forth in sections 302(h), 303, and 304 of the MSA, Councils are responsible for:

- Conducting public hearings to allow for public input into the development of FMPs and amendments,
- Reviewing pertinent information,
- Preparing fishery management plans and amendments for fisheries requiring conservation and management
- Drafting or deeming regulations to implement the plans or amendments
- Developing ACLs,
- Identifying research priorities, and
- Transmitting complete packages containing documentation necessary for NMFS to initiate a review of compliance with all applicable laws including NEPA.

b. MSA Role of NMFS

As set forth in section 304(a) of the MSA, the role of NMFS with respect to fishery management plans and plan amendments developed by the Council is to review– and approve, disapprove, or partially approve –those plans and amendments in accordance with specified procedures, including:

- Immediately upon transmittal of the FMP or FMP amendment: publish a plan or amendment in the Federal Register for a 60-day comment period.

- Approve, disapprove, or partially approve a plan or amendment within 30 days of the end of the comment period on the plan or amendment. Disapproval must be based on inconsistency with the MSA or other applicable law. In addition, disapprovals must provide guidance on what was inconsistent and how to remedy the situation, if possible (see MSA section 304(a)(3)(A)-(C)).

In addition, as set forth in section 304(b) the role of NMFS with respect to Council-recommended draft regulations is to:

- Immediately upon transmittal of the proposed regulations: initiate an evaluation of whether they are consistent with the fishery management plan, plan amendment, the MSA, and other applicable law.

- Within 15 days make a determination of consistency, and—

    - if that determination is affirmative: publish the regulations for a public comment period of 15 to 60 days; or,

    - if that determination is negative: notify the Council in writing of the inconsistencies and provide recommendations on revisions that would make the proposed regulations consistent.

- Consult with the Council before making any revisions to the proposed regulations,

- Promulgate final regulations within 30 days after the end of the comment period and publish in the Federal Register an explanation of any differences between the proposed and final regulations.

The MSA, at section 304(c), also authorizes NMFS to prepare a fishery management plan or amendment if:

(a) the Council fails to develop and submit to NMFS, after a reasonable period of time, a fishery management plan for such fishery, or any necessary amendment to such a plan, if such fishery requires conservation and management;

(b) the NMFS disapproves or partially disapproves any such plan or amendment, or disapproves a revised plan or amendment, and the Council involved fails to submit a revised or further revised plan or amendment; or

(c) the NMFS is given authority to prepare such plan or amendment under the MSA.
NMFS may also develop regulations to implement Secretarial plans and amendments (MSA section 304(c)(6), (7)).

c. Other Applicable Laws Roles for NMFS and Councils

As described in section D in Appendix 2 of the OG, the OALs set forth a variety of requirements for analysis, documentation, determinations, and procedures. Because of the close relationship between NMFS' actions and the Council's recommendations, compliance with the OALs will be most effective if NMFS and the Councils coordinate closely. The ROAs explain how these relationships work for each Council/Region pair. Council staff can often be responsible for drafting supporting analyses and documentation; however, it is the NMFS' responsibility to ensure the final documents are legally sufficient.

4.1.1.2 Specific Elements and their Relationship to Decision-making

The MSA and OALs set forth specific analytical and procedural requirements that interact with NMFS's and the Councils' decision-making processes under the MSA. The mandates on NMFS, as the federal action agency, are distinct from the requirements pertaining to the activities of the Councils, in their role as advisory bodies. Nothing precludes a Council's development of analyses and documentation to support compliance with the OALs, and in fact this practice is recommended. However, ultimate legal responsibility for most requirements lies with NMFS. It is the goal to have as complete analysis and documentation as possible available during Council deliberations.

MSA Role of the Councils

As set forth in sections 302(h), 303, and 304 of the MSA, Councils are responsible for:

- Conducting public hearings to allow for public input into the development of FMPs and amendments,
- Reviewing pertinent information,
- Preparing fishery management plans and amendments for fisheries requiring conservation and management
- Drafting or deeming regulations to implement the plans or amendments
- Developing ACLs,
- Identifying research priorities, and
- Transmitting complete packages containing documentation necessary for NMFS to

initiate a review of compliance with all applicable laws including NEPA.
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MSA Role of NMFS

As set forth in section 304(a) of the MSA, the role of NMFS with respect to fishery management plans and plan amendments developed by the Council is to review – and approve, disapprove, or partially approve –those plans and amendments in accordance with specified procedures, including:

- Immediately upon transmittal of the FMP or FMP amendment publish a plan or amendment in the Federal Register for a 60-day comment period.
- Approve, disapprove, or partially approve a plan or amendment within 30 days of the end of the comment period on the plan or amendment. Disapproval must be based on inconsistency with the MSA or other applicable law. In addition, disapprovals must provide guidance on what was inconsistent and how to remedy the situation, if possible (see MSA section 304(a)(3)(A)-(C)).

In addition, as set forth in section 304(b) the role of NMFS with respect to Council-recommended draft regulations is to:

- Immediately upon transmittal of the proposed regulations initiate an evaluation of whether they are consistent with the fishery management plan, plan amendment, the MSA, and other applicable law.
- Within 15 days make a determination of consistency, and—
  - if that determination is affirmative, publish the regulations for a public comment period of 15 to 60 days; or,
  - if that determination is negative, notify the Council in writing of the inconsistencies and provide recommendations on revisions that would make the proposed regulations consistent.
- Consult with the Council before making any revisions to the proposed regulations,
- Promulgate final regulations within 30 days after the end of the comment period and publish in the Federal Register an explanation of any differences between the proposed and final regulations.

The MSA, at section 304(c), also authorizes NMFS to prepare a fishery management plan or amendment if:

> (a) the appropriate Council fails to develop and submit to NMFS, after a reasonable period of time, a fishery management plan for such fishery, or any necessary amendment to such a plan, if such fishery requires conservation and management;
> (b) NMFS disapproves or partially disapproves any such plan or amendment, or disapproves a revised plan or amendment, and the Council involved fails to submit a revised or further revised plan or amendment; or
> (c) NMFS is given authority to prepare such plan or amendment under the MSA.
> NMFS may also develop regulations to implement Secretarial plans and amendments. (MSA section 304(c)(6), (7)).

Other Applicable Laws Roles for NMFS and COUNCIL

As described in section D in Appendix 2 of the OG, the OALs set forth a variety of requirements for analysis, documentation, determinations, and procedures. Because of the close relationship between NMFS's actions and the Council's recommendations, compliance with the OALs will be most effective if NMFS and the Councils coordinate closely. The ROAs explain how these relationships work for each Council/Region pair. Council staff can often be responsible for drafting supporting analyses and documentation; however, it is NMFS's responsibility to ensure the resulting documents fully comply with all law.

4.1.1.2.1 Advisory Panels

Advisory Panels are established as necessary to assist in carrying out the functions of the Council under the MSA. Section 302(g)(4) of the MSA establishes Advisory Panels to "assist in the evaluation of information relevant to the development of any fishery management plan or plan amendment for a fishery." The Western Pacific Regional Fishery Management Council's Advisory Panel includes representation from various sectors of the fisheries. Members of the Subpanels are selected by the Council and serve four-year terms with an overall Advisory Panel Chair and a Vice-Chair, with a Chair for each Advisory Panel sub-panel. Sub-panels are designated by the Archipelago FEPs and have representation from user groups and interests concerned with management of the fishery including fair representation of commercial fishing interests in the Council's geographical area of authority. The Advisory Panel provides advice on the content and effects of management plans, amendments and pre-season and in-season management measures, as well as issues to be discussed at Council Meetings.

The Pacific Remote Islands Area FEP Sub-Panel includes. Recommendations from the Advisory Panel and its Sub-Panels are provided to the Council for its consideration at Council Meetings.

4.1.1.2.2 Plan Teams

Plan teams are a form of advisory panel authorized under Section 302(g) of the MSA. FEP Plan Teams are comprised of Federal, State and non-government specialists that are appointed by the Council and serve indefinite terms. The Council created an Archipelagic FEP Plan Team to oversee the ongoing development and implementation of the American Samoa, Hawaii, Mariana, and PRIA FEPs. The Team is also responsible for reviewing information pertaining to the performance of all the fisheries, the status of all the stocks managed under the four Archipelagic FEPs, monitoring the performance of the FEP through the production of an annual stock assessment and fishery evaluation (SAFE) report , providing information on the status of the fish stocks and other components of the ecosystem, and recommending conservation and management adjustments under framework procedures to better achieve management objectives. The Archipelagic Plan Team's findings and recommendations are reported to the Council at its regular meetings. The Archipelagic Plan Team meets at least once annually and its chair is appointed by the Council Chair after consultation with the Council's Executive Standing Committee.

4.1.1.2.3 Science and Statistical Committee

The Scientific and Statistical Committee (SSC) is mandated under MSA 302(g) to "assist the Council in the development, collection, evaluation, and peer review of such statistical,

biological, economic, social, and other scientific information as is relevant to such Council's development and amendment of any fishery management plan." The Western Pacific Regional Fishery Management Council's SSC is composed of experts with scientific or technical credentials and experience from State and Federal agencies, academic institutions, and other sources. SSC Members represent a wide range of disciplines required for preparation and review of Fishery Ecosystem Plans.

The SSC typically meetings several days prior to a Council meeting to identify scientific resources required for the development of management plans and amendments and recommend resources for Plan Teams; Identify scientific resources required for the development of management plans and amendments and recommend resources for Plan Teams; Provide ongoing multi-disciplinary review of management plans or amendments and advise the Council on their scientific content, including recommendations for acceptable biological catch, preventing overfishing, maximum sustainable yield and achieving rebuilding targets, and reports on stock status and health, bycatch, habitat status, social and economic impacts of management measures and sustainability of fishing practices; Assist the Council in the development, collection, evaluation and peer review of such statistical, biological, economic, social, and other scientific information as is relevant to the Council's activities, and recommend methods and means for the development and collection of such information; Recommend to the Council the composition of Plan Teams; and provide scientific advice to the Council through recommendations on issues and action items.

4.1.1.2.4 Fishing Industry Advisory Committee

Section 302(g) of the MSA requires the Council to establish a Fishing Industry Advisory Committee (FIAC). It includes representation from various fishing sectors of the Western Pacific region. Members of the committee are selected by the Council and serve four year terms, with representation from each of the island jurisdictions. The FIAC reports to the Council and has representation from industry user groups concerned with the management of the fishery for which a plan is being prepared or reviewed, with fair representation of the fishing industry interests in the Council's geographical area of authority. The functions of the FIAC are to advise the Council on fishery management problems; to provide input to the fishery management planning efforts; and to advise the Council on the content and effects of management plans, amendments, and pre-season and in-season management measures. The FIAC includes 10 members from each Archipelagic FEP (with the PRIA FEP included with the Hawaii FEP).

4.1.1.2.5 REAC and other Council Committees

The Regional Ecosystem Advisory Committee (REAC)'s primary role is to provide a forum for government agencies, organizations and other entities to share information to better integrate and coordinate ocean and coastal management. Sub-committees for each area are created with members that include representation from the Council, various Federal, State and local agencies, non-government specialists and private business from each respective area. Members of the REAC are appointed by the Council with the Chair of each area sub-committee appointed by the Council Chair after consultation with the Executive and Budget Committee.

Other Council Committees created to assist the Council in carrying out its statutory functions, as provided under section 302(g)(2) of the MSA include:

- Protected Species Advisory Committee
- Social Science Planning Committee
- Community Demonstration Projects Advisory Panel
- Community Development Program Advisory Panel
- Fishery Data Collection and Research Committee
- Marine Planning and Climate Change Committee
- Education Committee
- Non-Commercial Fisheries Advisory Committee

4.1.1.2.6 Ad-hoc Committees and Working Groups

The Council develops different ad-hoc committees and working groups to deal with specific issues relevant to the FEP and assist it in carrying out its statutory function.

4.1.1.2.7 Federal Agencies

4.1.1.2.7.1 NMFS

The National Marine Fisheries Service (NMFS) to implements Council recommendations and is a primary federal enforcement agency for fisheries and other marine resource regulations. Recommendations from the Council, including transmitted amendments and plans, are provided to the NMFS and the Department of Commerce for approval. The Secretary of Commerce may approve, partially-approve, or reject any amendment or plan, in which case the Council will revisit or revise any partially-approved or rejected amendment or plan.

Regionally, the Council works in conjunction with the NMFS Pacific Islands Regional Office (PIRO) and the Pacific Islands Fisheries Science Center (PIFSC).

4.1.1.2.7.2 US Fish and Wildlife Service

The US Fish and Wildlife Service is a non-voting member of the Council and provide information as needed. Coordination on fishing issues and regulations between the Council and USFWS is crucial for the success of any regulations issued in the area.

4.1.1.2.7.3 US Coast Guard

The United States Coast Guard, District 14, is responsible for fishery regulation enforcement in the Pacific Remote Islands Area, including enforcing regulations listed in the FEP.

4.1.1.2.8 Local Agencies

There are no local agencies in the Pacific Remote Islands Areas.

4.1.1.2.9 Regional Entities

There are no current regional entities involved in fisheries management in the PRIA.

4.1.1.2.10 Fishery Impact Statement

The Magnuson-Stevens Act requires that fishery management plan and plan amendments submitted to the Secretary after October 1, 1990 assesses the likely biological and socioeconomic effects of the conservation and management measures on fishery participants and

their communities; participants in the fisheries conducted in adjacent areas under the authority of another Council; and the safety of human life at sea. This is typically referred to as a Fishery Impact Statement (FIS). Appendix D contains a list of all relevant amendments that predate this FEP, as well as amendments that were approved subsequent to its adoption. The elements of a FIS are integrated into the environmental impact analyses prepared for these amendment documents, as required. To find a FIS for a specific management measure contained in this FEP, see Appendix D.

4.1.1.2.11 Public Consultation Process

The public is provided opportunity to comment on and provide testimony at all meetings noticed through the Federal Register. The Council also accepts comments and testimony by phone, email and fax.

4.1.1.3 The Role of Agreements, Statement of Organization Practices and Procedures, etc.

The Council enters into agreements to help define specific roles and responsibilities of the agencies in developing, approving, and implementing fishery management plans and actions under the MSA. In 2014, the Council entered into a Regional Operating Agreement with the NMFS PIRO and PIFSC to define specific roles and responsibilities of the Council and NMFS Offices in developing, approving and implementing fishery actins under the MSA. The ROA sets forth procedures and review processes to ensure that proposed management actions are adequately and completely analyzed upon decision making. The ROA functions with the general framework of the "Operational Guidelines" set forth by NOAA and can be amended as need for consistency.

In addition to external agreements, the Council establishes internal working policies and procedures to through which the Council conducts business and carries out its functions under the MSA. The Statement of Organization Practices and Procedures (SOPP) is updated periodically as needed. The SOPP defines the Council's organizational structure, standards of conduct, policies and procedures, advisory bodies and their role and responsibilities and administrative system.

4.1.1.4 Communication Plan

Communication is an essential component of the Council's bottom-up approach to fisheries management and is one of the Council's seven Guiding Principles: "Conduct education and outreach to foster good stewardship principles and broad and direct public participation in the Council's decision making process."

The Council's Public Involvement and Outreach Plan was prepared in 1995 and serves as the basis for the Council's ongoing communication efforts. The plan identifies training sessions, programs, information sessions, special events and product development (audio-visual, printed materials and displays) for three targeted audiences: fishing communities, regulatory/policy setting agencies and the general public.

In 2010 and 2011, fishermen focus groups were conducted in Hawaii to assess the effectiveness of the Council's outreach efforts and elicit suggestions for improving it. This research was conducted by an independent research firm, which also conducted interviews to gauge the

effectiveness of particular Council outreach projects in the Territories and the Commonwealth. The results indicated that fishermen were aware of the Council; however, their understanding of what the Council does could be improved. In 2011, in response to these comments, the Council developed a Communications Framework among other activities.

The Council publishes meeting notices in local publications in English and, in American Samoa, also in the Samoan language. Other regular Council outreach materials include a quarterly newsletter, a monograph series, brochures, displays, magazine articles and press releases and occasional videos, public serve announcements, proceedings and books.

The Council's regularly scheduled outreach and education activities, some of which have been conducted annually for more than a decade, include Fishers Forums, student art contests with teacher resources on various themes of fishery importance, traditional lunar calendars highlighting student art and traditional fishery information, and high school summer courses. The Council also occasionally conducts International Fishers Forums, teacher workshops, student symposiums, community workshops, fishermen workshops and other special events locally, regionally, nationally and internationally.

In 2013, the Council established an Education Committee, which spearheaded a memorandum of understanding signed by federal and local governments and higher education institutions in the Western Pacific Region. The aspiration of the MOU is to improve the capacities of the US Pacific Island territories to manage their fisheries and to enhance tertiary education in fisheries science and management offered in Hawai`i. In 2015, the first outcomes of the MOU included the implementation of the US Pacific Territories Fishery Capacity-Building scholarship and internship program.

The Council has increased its outreach through social media, including the Council website, Facebook, Twitter and Constant Contact distribution. It also works with the education and outreach staff of the other seven Reginal Fishery Management Councils on the fisherycouncils.org website, Managing Our Nation's Fisheries conferences and occasional publications, displays and events.

4.1.1.5 Council Five Year Research Priorities

The reauthorized Magnuson-Stevens Fishery Conservation and Management Act (MSRA), created new responsibilities and authorities for domestic regional fishery management councils and their advisory bodies. Following is the relevant MSRA text regarding the development and implementation of five-year regional research priorities by Councils. Section 302 (h) Each Council shall develop, in conjunction with the scientific and statistical committee, multi-year research priorities for fisheries, fishery interactions, habitats, and other areas of research that are necessary for management purposes that shall –

> (A) establish priorities for 5-year periods;
> (B) be updated as necessary; and
> (C) be submitted to the Secretary and the regional science centers of the National Marine Fisheries Service for their consideration in developing research priorities and budgets for the region of the Council.

The research priority document is vetted through the Council advisory groups and submitted to the Secretary of Commerce and NMFS on an annual basis for their consideration. These priorities are also the basis for Federal funding opportunities such as the Saltonstall-Kennedy Grant Program. A process of addressing and monitoring these research priorities is yet to be developed by the Council and NMFS PIFSC.

Stock assessments for Council managed fisheries remains the highest research priority. For current research priorities, see the Council's website at www.wpcouncil.org.

Research priorities for the PRIA include, but are not limited to:

- Species connectivity and movement
- Effects of ocean acidification and increases ocean temperatures
- Effects of large scale MPAs on fisheries including those for HMS stocks
- Cooperative research involving the fishing industry

4.1.1.6 Annual Fishery Reports and their Use

The Council's annual fishery reports serve as Stock Assessment and Fishery Evaluation (SAFE) reports for the Western Pacific region and contain information beyond the SFAE report requirements found in National Standard 2. The reports are generated by the Archipelagic and the Pelagic Plan Team and contain information about the MUS and their associated ecosystems derived from fishery dependent and fishery independent data collection systems. Some of the major elements in the reports are:

Fishery Descriptions: 1) number of participants; 2) number of permit holders; 3) type and quantity of fishing gear used; 4) number of vessels involved; 5) frequency of trips; 6) trip costs; 7) average number of crew or fishing party; 8) species of fish involved and their location(s); 9) disposition of catch; 10) annual catch limit; 11) Status Determination Criteria; 12) Overfishing Limit and Allowable Biological Catch; 13) measures to prevent overfishing and achieve rebuilding targets; 14) sources of fishing mortality; 15) harvest capacity and extent; 16) fishing communities associated with the fishery; 16) fishery bycatch

Fishery Ecosystems: 1) oceanographic indicators; 2) climate change indicators; 3) biological indicators; 4) habitat (status of fish habitat and marine ecosystem; EFH descriptions information; species list and locations; fishing activities that may adversely affect EFH; and non-fishing activities that may adversely affect EFH); 5) human dimensions (describing the participants; community indicators; cultural importance; economics; imports and exports); 6) protected species (incidental take data in FEP Authorities and Primary Management and Process Drivers.

Data Integration and Fishery Characterizations: 1) fishery and ecosystem indicator integration; 2) fishery and socio-economic indicator integration; 3) fishery and climate indicator integration

The annual fishery ecosystem reports are used to monitor the fisheries and the status of fishery ecosystems. Because they contain the most recent information about the fisheries, they serve as the basis for developing management measures and evaluating management alternatives as well

as tracking the performance of the Council's FEPs. A comprehensive report will be generated that contains analysis of available data and will be updated on a 3-year cycle. Summaries of datasets that are generated on an annual basis will be produced annually.

4.1.1.7 Marine Conservation Plan

Pursuant to the MSA, the Council is required to develop a 3-yr Marine Conservation Plan (MCP) for the PRIA. The PRIA MCP identifies conservation and management objectives and prioritize planned marine conservation projects, including research activities. Projects applicable to Hawaii are also included in the PRIA MCP.

4.1.1.8 International Coordination

The Council is an active participant in the development and implementation of international agreements regarding marine resources. The majority deal with management of the highly migratory pelagic species and include decisions made by the Western and Central Pacific Fisheries Commission (WCPFC) and the Inter-American Tropical Tuna Commission (IATTC). The South Pacific RFMO also covers stocks that may occur in the PRIA.

The Council's management regime serves is a model to other member nations with regards to ecosystem based-management. For example, the Council's comprehensive and interdisciplinary approach to pelagics fisheries management is an example of advances in conservation through improved gear technology; community participation through the public meeting process; sustainable fishing through limited entry programs and adherence to quota management; and using the best available science through cooperative research, improved stock assessments, and sharing knowledge within the regional fishery management organization (RFMO) process.

The Council also participates in and promotes the formation of regional and international arrangements through other RFMOs (e.g., the Forum Fisheries Agency, the Secretariat of the Pacific Community's Oceanic Fisheries Programme, Secretariat of the Pacific Environment Programme, the Food and Agriculture Organization of the U.N., the Intergovernmental Oceanographic Commission of UNESCO, the Inter-American Convention for the Protection and Conservation of Sea Turtles, the International Scientific Council, and the North Pacific Marine Science Organization) for assessing and conserving all marine resources throughout their range, including the ecosystems and habitats that they depend on. Of increasing importance are bilateral agreements regarding demersal resources that are shared with adjacent countries.

4.1.1.9 Other Applicable Laws and their Role

Section 303(a)(1)(C) of the MSA requires federal fishery management plans to be consistent with other applicable laws. These other laws impose additional procedural, substantive, and timing requirements on the decision process and their applicability must be assessed on a case-by-case basis. This FEP is consistent with the Magnuson-Stevens Act (16 USC 1851), including the ten National Standards, and other applicable law. These laws typically include the following:

- Administrative Procedure Act
- Coastal Zone Management Act

- Endangered Species Act
- National Monument
- Information Quality Act
- Marine Mammal Protection Act
- National Environmental Policy Act
- National Marine Sanctuaries Act
- Paperwork Reduction Act
- Regulatory Flexibility Act
- Executive Orders 12291 (cost-benefit and avoiding duplication), 12630 (governmental actions and interference with constitutionally protected property rights), 12866 (regulatory planning and review), 12898 (environmental justice), 13089 (coral reef protection), 13132 (federalism implication of federal actions), 13158 (marine protected areas), 13175 (consultation and coordination with Indian tribal governments), 13196 (Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve), 13272 (stewardship of the ocean, our coasts, and the Great Lakes), 13547 (National Ocean Policy) and 12962 (recreational fisheries)

Specific information regarding the implications of each of these can be in the Operational Guidelines for the Fishery Management Process developed by NMFS in consultation with the Council Coordinating Committee at http://www.nmfs.noaa.gov/sfa/laws_policies/operational_guidelines/index.html. The statutes themselves, along with their guidance language, regulations, and associated case law are controlling in the instance of any discrepancy between them and this document.

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Appendix A: List of Acronyms

APA: Administrative Procedure Act

B: Stock biomass

B_{FLAG}: Minimum Biomass Flag

B_{MSY}: Biomass Maximum Sustainable Yield

B_{OY}: Biomass Optimum Yield

BMUS: Bottomfish Management Unit Species

CFR: Code of Federal Regulations

CITES: Council on International Trade and Endangered Species

CNMI: Commonwealth of the Northern Mariana Islands

CPUE: Catch per unit effort at the reference point

$CPUE_{MSY}$: Catch per unit effort Maximum Sustainable Yield

$CPUE_{REF}$: Catch per unit effort at the Reference Point

CRAMP: Coral Reef Assessment and Monitoring Program

CRE: Coral Reef Ecosystem

CRE-FMP: Coral Reef Ecosystem Fishery Management Plan

CRTF: Coral Reef Task Force

DAR: Division of Aquatic Resources, State of Hawaii

DOC: United States Department of Commerce

DOD: United States Department of Defense

DOI: United States Department of the Interior

EEZ: Exclusive Economic Zone

EFH: Essential Fish Habitat

EIS: Environmental Impact Statement

E_{MSY}: Effort Maximum Sustainable Yield

ENSO: El Niño Southern Oscillation

EO: Executive Order

EPAP: Ecosystem Principals Advisory Panel

ESA: Endangered Species Act

F: Fishing mortality

F_{MSY}: Fishing mortality Maximum Sustainable Yield

F_{OY}: Fishing mortality Optimum Yield

FEP: Fishery Ecosystem Plan

FLPMA: Federal Land Policy and Management Act

fm: fathoms

FMP: Fishery Management Plan

FR: Federal Register

FRFA: Final Regulatory Flexibility Analysis

ft: feet

FWCA: Fish and Wildlife Coordination Act

GIS: Geographic information systems

GPS: Global Positioning System

HAPC: Habitat Areas of Particular Concern

IQA: Information Quality Act

IRFA Initial Regulatory Flexibility Analysis

kg: kilograms

km: kilometers

lb: pounds

LOF List of Fisheries

m:	meters
mt:	metric tons
MFMT:	maximum fishing mortality threshold
MHI:	Main Hawaiian Islands
min SST:	minimum spawning stock threshold
mm:	millimeters
MMPA:	Marine Mammal Protection Act
MPA:	Marine Protected Area
MSA:	Magnuson-Stevens Fishery Conservation and Management Act
MSST:	Minimum Stock Size Threshold
MSY:	Maximum Sustainable Yield
MUS:	Management Unit Species
NDSA:	Naval Defense Sea Areas
NEPA:	National Environmental Policy Act
nm or nmi:	nautical miles
NMFS:	National Marine Fisheries Service (also known as NOAA Fisheries Service)
NOAA:	National Oceanic and Atmospheric Administration
NWHI:	Northwestern Hawaiian Islands
NWR:	National Wildlife Refuge
NWRSAA:	National Wildlife Refuge System Administration Act
OMB:	Office of Management and Budget
OY:	Optimum Yield
PBR:	Potential Biological Removal
PIFSC:	Pacific Islands Fisheries Science Center, NMFS
PIRO:	Pacific Islands Regional Office, NMFS

PRA: Paperwork Reduction Act

PRIA: Pacific Remote Island Areas

RFA: Regulatory Flexibility Act

RIR: Regulatory Impact Review

SFA: Sustainable Fisheries Act

SLA: Submerged Lands Act

SPR: Spawning Potential Ratio

SSC: Scientific and Statistical Committee

TALFF: Total Allowable Level of Foreign Fishing

TSLA: Territorial Submerged Lands Act

USCG: United States Coast Guard

USFWS: United States Fish and Wildlife Service

VMS: Vessel Monitoring System

WPacFIN: Western Pacific Fisheries Information Network, NMFS

WPRFMC: Western Pacific Regional Fishery Management Council

Appendix B: List of Definitions

Adaptive Management: A program that adjusts regulations based on changing conditions of the fisheries and stocks.

Bycatch: Any fish harvested in a fishery which are not sold or kept for personal use, and includes economic discards and regulatory discards.

Barrier Net: A small-mesh net used to capture coral reef or coastal pelagic fishes.

Bioprospecting: The search for commercially valuable biochemical and genetic resources in plants, animals and microorganisms for use in food production, the development of new drugs and other biotechnology applications.

Charter Fishing: Fishing from a vessel carrying a passenger for hire (as defined in section 2101(21a) of Title 46, United States Code) who is engaged in recreational fishing.

Commercial Fishing: Fishing in which the fish harvested, either in whole or in part, are intended to enter commerce or enter commerce through sale, barter or trade. For the purposes of this Fishery Ecosystem Plan, commercial fishing includes the commercial extraction of biocompounds.

Consensual Management: Decision making process where stakeholders meet and reach consensus on management measures and recommendations.

Coral Reef Ecosystem (CRE): Those species, interactions, processes, habitats and resources of the water column and substrate located within any waters less than or equal to 50 fathoms in total depth.

Council: The Western Pacific Regional Fishery Management Council (WPRFMC).

Critical Habitat: Those geographical areas that are essential for bringing an endangered or threatened species to the point where it no longer needs the legal protections of the Endangered Species Act (ESA), and which may require special management considerations or protection. These areas are designated pursuant to the ESA as having physical or biological features essential to the conservation of listed species.

Dealer: Any person who (1) Obtains, with the intention to resell management unit species, or portions thereof, that were harvested or received by a vessel that holds a permit or is otherwise regulated under this FEP; or (2) Provides recordkeeping, purchase, or sales assistance in obtaining or selling such management unit species (such as the services provided by a wholesale auction facility).

Dip Net: A hand-held net consisting of a mesh bag suspended from a circular, oval, square or rectangular frame attached to a handle. A portion of the bag may be constructed of material, such as clear plastic, other than mesh.

Ecology: The study of interactions between an organism (or organisms) and its (their) environment (biotic and abiotic).

Ecological Integrity: Maintenance of the standing stock of resources at a level that allows ecosystem processes to continue. Ecosystem processes include replenishment of resources, maintenance of interactions essential for self-perpetuation and, in the case of coral reefs, rates of accretion that are equal to or exceed rates of erosion. Ecological integrity cannot be directly measured but can be inferred from observed ecological changes.

Economic Discards: Fishery resources that are the target of a fishery but which are not retained because they are of an undesirable size, sex or quality or for other economic reasons.

Ecosystem: A geographically specified system of organisms (including humans), the environment, and the processes that control its dynamics.

Ecosystem-Based Fishery Management: Fishery management actions aimed at conserving the structure and function of marine ecosystems in addition to conserving fishery resources.

Ecotourism: Observing and experiencing, first hand, natural environments and ecosystems in a manner intended to be sensitive to their conservation.

Environmental Impact Statement (EIS): A document required under the National Environmental Policy Act (NEPA) to assess alternatives and analyze the impact on the environment of proposed major Federal actions significantly affecting the human environment.

Essential Fish Habitat (EFH): Those waters and substrate necessary to a species or species group or complex, for spawning, breeding, feeding or growth to maturity.

Exclusive Economic Zone (EEZ): The zone established by Proclamation numbered 5030, dated March 10, 1983. For purposes of the Magnuson Act, the inner boundary of that zone is a line coterminous with the seaward boundary of each of the coastal states, commonwealths, territories or possessions of the United States.

Exporter: One who sends species in the fishery management unit to other countries for sale, barter or any other form of exchange (also applies to shipment to other states, territories or islands).

Fish: Finfish, mollusks, crustaceans and all other forms of marine animal and plant life other than marine mammals and birds

Fishery: One or more stocks of fish that can be treated as a unit for purposes of conservation and management and that are identified on the basis of geographical, scientific, technical, recreational and economic characteristics; and any fishing for such stocks.

Fishery Ecosystem Plan: A fishery ecosystem management plan that contains conservation and management measures necessary and appropriate for fisheries within a given ecosystem to prevent overfishing and rebuild overfished stocks, and to protect, restore, and promote the long-term health and stability of the fishery.

Fishing: The catching, taking or harvesting of fish; the attempted catching, taking or harvesting of fish; any other activity that can reasonably be expected to result in the catching, taking or harvesting of fish; or any operations at sea in support of, or in preparation for, any activity described in this definition. Such term does not include any scientific research activity that is conducted by a scientific research vessel.

Fishing Community: A community that is substantially dependent on or substantially engaged in the harvest or processing of fishery resources to meet social and economic needs and includes fishing vessel owners, operators and crews and United States fish processors that are based in such community.

Food Web: Inter-relationships among species that depend on each other for food (predator-prey pathways).

Framework Measure: Management measure listed in an FEP for future consideration. Implementation can occur through an administratively simpler process than a full FEP amendment.

Ghost Fishing: The chronic and/or inadvertent capture and/or loss of fish or other marine organisms by lost or discarded fishing gear.

Habitat: Living place of an organism or community, characterized by its physical and biotic properties.

Habitat Area of Particular Concern (HAPC): Those areas of EFH identified pursuant to Section 600.815(a)(8). In determining whether a type or area of EFH should be designated as a HAPC, one or more of the following criteria should be met: (1) ecological function provided by the habitat is important; (2) habitat is sensitive to human-induced environmental degradation; (3) development activities are, or will be, stressing the habitat type; or (4) the habitat type is rare.

Harvest: The catching or taking of a marine organism or fishery MUS by any means.

Hook-and-line: Fishing gear that consists of one or more hooks attached to one or more lines.

Live Rock: Any natural, hard substrate (including dead coral or rock) to which is attached, or which supports, any living marine life-form associated with coral reefs.

Longline: A type of fishing gear consisting of a main line which is deployed horizontally from which branched or dropper lines with hooks are attached.

Low-Use MPA: A Marine Protected Area zoned to allow limited fishing activities.

Main Hawaiian Islands (MHI): The islands of the Hawaiian Islands archipelago consisting of Niihau, Kauai, Oahu, Molokai, Lanai, Maui, Kahoolawe, Hawaii and all of the smaller associated islets lying east of 161° W longitude.

Marine Protected Area (MPA): An area designated to allow or prohibit certain fishing activities.

Marine National Monument (MNM):

Maximum Sustainable Yield (MSY): The largest long-term average catch or yield that can be taken, from a stock or stock complex under prevailing ecological and environmental conditions and fishery technological characteristics (e.g., gear selectivity), and the distribution of catch among fleets.

National Marine Fisheries Service (NMFS): The component of the National Oceanic and Atmospheric Administration (NOAA), Department of Commerce, responsible for the conservation and management of living marine resources. Also known as NOAA Fisheries Service.

No-Take MPA: A Marine Protected Area where no fishing or removal of living marine resources is authorized.

Northwestern Hawaiian Islands (NWHI): the islands of the Hawaiian Islands archipelago lying to the west of 161°W longitude.

Optimum Yield (OY): With respect to the yield from a fishery "optimum" means the amount of fish that: (a) will provide the greatest overall benefit to the nation, particularly with respect to food production and recreational opportunities and taking into account the protection of marine ecosystems; (b) is prescribed as such on the basis of the MSY from the fishery, as reduced by any relevant economic, social or ecological factor; and (c) in the case of an overfished fishery, provides for rebuilding to a level consistent with producing the MSY in such fishery.

Overfished: A stock or stock complex is considered "overfished" when its biomass has declined below a level that jeopardizes the capacity of the stock or stock complex to produce maximum sustainable yield on a continuing basis.

Overfishing: (to overfish) occurs whenever a stock or stock complex is subjected to a level of fishing mortality or total annual catch that jeopardizes the capacity of a stock or stock complex to produce maximum sustainable yield on a continuing basis.

Pacific Remote Island Areas (PRIA): Baker Island, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Atoll, Wake Island and Palmyra Atoll.

Passive Fishing Gear: Gear left unattended for a period of time prior to retrieval (e.g., traps, gill nets).

Precautionary Approach: The implementation of conservation measures even in the absence of scientific certainty that fish stocks are being overexploited.

Recreational Fishing: Fishing for sport or pleasure.

Recruitment: A measure of the weight or number of fish which enter a defined portion of the stock such as fishable stock (those fish above the minimum legal size) or spawning stock (those fish which are sexually mature).

Reef: A ridgelike or moundlike structure built by sedentary calcareous organisms and consisting mostly of their remains. It is wave-resistant and stands above the surrounding sediment. It is characteristically colonized by communities of encrusting and colonial invertebrates and calcareous algae.

Reef-obligate Species: An organism dependent on coral reefs for survival.

Regulatory Discards: Any species caught that fishermen are required by regulation to discard whenever caught, or are required to retain but not sell.

Resilience: The ability of a population or ecosystem to withstand change and to recover from stress (natural or anthropogenic).

Restoration: The transplanting of live organisms from their natural habitat in one area to another area where losses of, or damage to, those organisms has occurred with the purpose of restoring the damaged or otherwise compromised area to its original, or a substantially improved, condition; additionally, the altering of the physical characteristics (e.g., substrate, water quality) of an area that has been changed through human activities to return it as close as possible to its natural state in order to restore habitat for organisms.

Rock: Any consolidated or coherent and relatively hard, naturally formed, mass of mineral matter.

Rod-and-Reel: A hand-held fishing rod with a manually or electrically operated reel attached.

Scuba-assisted Fishing: Fishing, typically by spear or by hand collection, using assisted breathing apparatus.

Secretary: The Secretary of Commerce or a designee.

Sessile: Attached to a substrate; non-motile for all or part of the life cycle.

Slurp Gun: A self-contained, typically hand-held, tube–shaped suction device that captures organisms by rapidly drawing seawater containing the organisms into a closed chamber.

Social Acceptability: The acceptance of the suitability of management measures by stakeholders, taking cultural, traditional, political and individual benefits into account.

Spear: A sharp, pointed, or barbed instrument on a shaft, operated manually or shot from a gun or sling.

Adaptive Management: A program that adjusts regulations based on changing conditions of the fisheries and stocks.

Bycatch: Any fish harvested in a fishery which are not sold or kept for personal use, and includes economic discards and regulatory discards.

Barrier Net: A small-mesh net used to capture coral reef or coastal pelagic fishes.

Bioprospecting: The search for commercially valuable biochemical and genetic resources in plants, animals and microorganisms for use in food production, the development of new drugs and other biotechnology applications.

Charter Fishing: Fishing from a vessel carrying a passenger for hire (as defined in section 2101(21a) of Title 46, United States Code) who is engaged in recreational fishing.

Commercial Fishing: Fishing in which the fish harvested, either in whole or in part, are intended to enter commerce or enter commerce through sale, barter or trade. For the purposes of this Fishery Ecosystem Plan, commercial fishing includes the commercial extraction of biocompounds.

Consensual Management: Decision making process where stakeholders meet and reach consensus on management measures and recommendations.

Coral Reef Ecosystem (CRE): Those species, interactions, processes, habitats and resources of the water column and substrate located within any waters less than or equal to 50 fathoms in total depth.

Council: The Western Pacific Regional Fishery Management Council (WPRFMC).

Critical Habitat: Those geographical areas that are essential for bringing an endangered or threatened species to the point where it no longer needs the legal protections of the Endangered Species Act (ESA), and which may require special management considerations or protection. These areas are designated pursuant to the ESA as having physical or biological features essential to the conservation of listed species.

Dealer: Any person who (1) Obtains, with the intention to resell management unit species, or portions thereof, that were harvested or received by a vessel that holds a permit or is otherwise regulated under this FEP; or (2) Provides recordkeeping, purchase, or sales assistance in obtaining or selling such management unit species (such as the services provided by a wholesale auction facility).

Dip Net: A hand-held net consisting of a mesh bag suspended from a circular, oval, square or rectangular frame attached to a handle. A portion of the bag may be constructed of material, such as clear plastic, other than mesh.

Ecology: The study of interactions between an organism (or organisms) and its (their) environment (biotic and abiotic).

Ecological Integrity: Maintenance of the standing stock of resources at a level that allows ecosystem processes to continue. Ecosystem processes include replenishment of resources, maintenance of interactions essential for self-perpetuation and, in the case of coral reefs, rates of accretion that are equal to or exceed rates of erosion. Ecological integrity cannot be directly measured but can be inferred from observed ecological changes.

Economic Discards: Fishery resources that are the target of a fishery but which are not retained because they are of an undesirable size, sex or quality or for other economic reasons.

Ecosystem: A geographically specified system of organisms (including humans), the environment, and the processes that control its dynamics.

Ecosystem-Based Fishery Management: Fishery management actions aimed at conserving the structure and function of marine ecosystems in addition to conserving fishery resources.

Ecotourism: Observing and experiencing, first hand, natural environments and ecosystems in a manner intended to be sensitive to their conservation.

Environmental Impact Statement (EIS): A document required under the National Environmental Policy Act (NEPA) to assess alternatives and analyze the impact on the environment of proposed major Federal actions significantly affecting the human environment.

Essential Fish Habitat (EFH): Those waters and substrate necessary to a species or species group or complex, for spawning, breeding, feeding or growth to maturity.

Exclusive Economic Zone (EEZ): The zone established by Proclamation numbered 5030, dated March 10, 1983. For purposes of the Magnuson Act, the inner boundary of that zone is a line coterminous with the seaward boundary of each of the coastal states, commonwealths, territories or possessions of the United States.

Exporter: One who sends species in the fishery management unit to other countries for sale, barter or any other form of exchange (also applies to shipment to other states, territories or islands).

Fish: Finfish, mollusks, crustaceans and all other forms of marine animal and plant life other than marine mammals and birds

Fishery: One or more stocks of fish that can be treated as a unit for purposes of conservation and management and that are identified on the basis of geographical, scientific, technical, recreational and economic characteristics; and any fishing for such stocks.

Fishery Ecosystem Plan: A fishery ecosystem management plan that contains conservation and management measures necessary and appropriate for fisheries within a given ecosystem to prevent overfishing and rebuild overfished stocks, and to protect, restore, and promote the long-term health and stability of the fishery.

Fishing: The catching, taking or harvesting of fish; the attempted catching, taking or harvesting of fish; any other activity that can reasonably be expected to result in the catching, taking or harvesting of fish; or any operations at sea in support of, or in preparation for, any activity described in this definition. Such term does not include any scientific research activity that is conducted by a scientific research vessel.

Fishing Community: A community that is substantially dependent on or substantially engaged in the harvest or processing of fishery resources to meet social and economic needs and includes fishing vessel owners, operators and crews and United States fish processors that are based in such community.

Food Web: Inter-relationships among species that depend on each other for food (predator-prey pathways).

Framework Measure: Management measure listed in an FEP for future consideration. Implementation can occur through an administratively simpler process than a full FEP amendment.

Ghost Fishing: The chronic and/or inadvertent capture and/or loss of fish or other marine organisms by lost or discarded fishing gear.

Habitat: Living place of an organism or community, characterized by its physical and biotic properties.

Habitat Area of Particular Concern (HAPC): Those areas of EFH identified pursuant to Section 600.815(a)(8). In determining whether a type or area of EFH should be designated as a HAPC, one or more of the following criteria should be met: (1) ecological function provided by the habitat is important; (2) habitat is sensitive to human-induced environmental degradation; (3) development activities are, or will be, stressing the habitat type; or (4) the habitat type is rare.

Harvest: The catching or taking of a marine organism or fishery MUS by any means.

Hook-and-line: Fishing gear that consists of one or more hooks attached to one or more lines.

Live Rock: Any natural, hard substrate (including dead coral or rock) to which is attached, or which supports, any living marine life-form associated with coral reefs.

Longline: A type of fishing gear consisting of a main line which is deployed horizontally from which branched or dropper lines with hooks are attached.

Low-Use MPA: A Marine Protected Area zoned to allow limited fishing activities.

Main Hawaiian Islands (MHI): The islands of the Hawaiian Islands archipelago consisting of Niihau, Kauai, Oahu, Molokai, Lanai, Maui, Kahoolawe, Hawaii and all of the smaller associated islets lying east of 161° W longitude.

Marine Protected Area (MPA): An area designated to allow or prohibit certain fishing activities.

Marine National Monument (MNM): A marine area established via Presidential Proclamation through the Antiquities Act of 1906.

Maximum Sustainable Yield (MSY): The largest long-term average catch or yield that can be taken, from a stock or stock complex under prevailing ecological and environmental conditions and fishery technological characteristics (e.g., gear selectivity), and the distribution of catch among fleets.

National Marine Fisheries Service (NMFS): The component of the National Oceanic and Atmospheric Administration (NOAA), Department of Commerce, responsible for the conservation and management of living marine resources. Also known as NOAA Fisheries Service.

No-Take MPA: A Marine Protected Area where no fishing or removal of living marine resources is authorized.

Northwestern Hawaiian Islands (NWHI): the islands of the Hawaiian Islands archipelago lying to the west of 161°W longitude.

Optimum Yield (OY): With respect to the yield from a fishery "optimum" means the amount of fish that: (a) will provide the greatest overall benefit to the nation, particularly with respect to food production and recreational opportunities and taking into account the protection of marine ecosystems; (b) is prescribed as such on the basis of the MSY from the fishery, as reduced by any relevant economic, social or ecological factor; and (c) in the case of an overfished fishery, provides for rebuilding to a level consistent with producing the MSY in such fishery.

Overfished: A stock or stock complex is considered "overfished" when its biomass has declined below a level that jeopardizes the capacity of the stock or stock complex to produce maximum sustainable yield on a continuing basis.

Overfishing: (to overfish) occurs whenever a stock or stock complex is subjected to a level of fishing mortality or total annual catch that jeopardizes the capacity of a stock or stock complex to produce maximum sustainable yield on a continuing basis.

Pacific Remote Island Areas (PRIA): Baker Island, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Atoll, Wake Island and Palmyra Atoll.

Passive Fishing Gear: Gear left unattended for a period of time prior to retrieval (e.g., traps, gill nets).

Precautionary Approach: The implementation of conservation measures even in the absence of scientific certainty that fish stocks are being overexploited.

Recreational Fishing: Fishing for sport or pleasure.

Recruitment: A measure of the weight or number of fish which enter a defined portion of the stock such as fishable stock (those fish above the minimum legal size) or spawning stock (those fish which are sexually mature).

Reef: A ridgelike or moundlike structure built by sedentary calcareous organisms and consisting mostly of their remains. It is wave-resistant and stands above the surrounding sediment. It is characteristically colonized by communities of encrusting and colonial invertebrates and calcareous algae.

Reef-obligate Species: An organism dependent on coral reefs for survival.

Regulatory Discards: Any species caught that fishermen are required by regulation to discard whenever caught, or are required to retain but not sell.

Resilience: The ability of a population or ecosystem to withstand change and to recover from stress (natural or anthropogenic).

Restoration: The transplanting of live organisms from their natural habitat in one area to another area where losses of, or damage to, those organisms has occurred with the purpose of restoring the damaged or otherwise compromised area to its original, or a substantially improved, condition; additionally, the altering of the physical characteristics (e.g., substrate, water quality) of an area that has been changed through human activities to return it as close as possible to its natural state in order to restore habitat for organisms.

Rock: Any consolidated or coherent and relatively hard, naturally formed, mass of mineral matter.

Rod-and-Reel: A hand-held fishing rod with a manually or electrically operated reel attached.

Scuba-assisted Fishing: Fishing, typically by spear or by hand collection, using assisted breathing apparatus.

Secretary: The Secretary of Commerce or a designee.

Sessile: Attached to a substrate; non-motile for all or part of the life cycle.

Slurp Gun: A self-contained, typically hand-held, tube–shaped suction device that captures organisms by rapidly drawing seawater containing the organisms into a closed chamber.

Social Acceptability: The acceptance of the suitability of management measures by stakeholders, taking cultural, traditional, political and individual benefits into account.

Spear: A sharp, pointed, or barbed instrument on a shaft, operated manually or shot from a gun or sling.

Stock Assessment: An evaluation of a stock in terms of abundance and fishing mortality levels and trends, and relative to fishery management objectives and constraints if they have been specified.

Stock of Fish: A species, subspecies, geographical grouping or other category of fish capable of management as a unit.

Submersible: A manned or unmanned device that functions or operates primarily underwater and is used to harvest fish.

Subsistence Fishing: Fishing to obtain food for personal and/or community use rather than for profit sales or recreation.

Target Resources: Species or taxa sought after in a directed fishery.

Trophic Web: A network that represents the predator/prey interactions of an ecosystem.

Trap: A portable, enclosed, box-like device with one or more entrances used for catching and holding fish or marine organism.

Western Pacific Regional Fishery Management Council (WPRFMC or Coucil): A Regional Fishery Management Council established under the MSA, consisting of the State of Hawaii, the Territory of American Samoa, the Territory of Guam, and the Commonwealth of the Northern Mariana Islands which has authority over the fisheries in the Pacific Ocean seaward of such States, Territories, Commonwealths, and Possessions of the United States in the Pacific Ocean Area. The Council has 13 voting members including eight appointed by the Secretary of Commerce at least one of whom is appointed from each of the following States: Hawaii, the Territories of American Samoa and Guam, and the Commonwealth of the Northern Mariana Islands.

Stock Assessment: An evaluation of a stock in terms of abundance and fishing mortality levels and trends, and relative to fishery management objectives and constraints if they have been specified.

Stock of Fish: A species, subspecies, geographical grouping or other category of fish capable of management as a unit.

Submersible: A manned or unmanned device that functions or operates primarily underwater and is used to harvest fish.

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Appendix C: Regulations Implementing the Pacific Remote Island Area Fishery Ecosystem Plan and PRIA Marine National Monument

PART 665—FISHERIES IN THE WESTERN PACIFIC

Contents

AUTHORITY: 16 U.S.C. 1801 *et seq.*

SOURCE: 75 FR 2205, Jan. 14, 2010, unless otherwise noted.

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Subpart A—General

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§665.1 Purpose and scope.

(a) The regulations in this part govern fishing for western Pacific fishery ecosystem MUS by vessels of the United States that operate or are based inside the outer boundary of the U.S. EEZ around American Samoa, Hawaii, Guam, the Northern Mariana Islands, Palmyra Atoll, Kingman Reef, Jarvis Island, Baker Island, Howland Island, Johnston Atoll, and Wake Island.

(b) General regulations governing fishing by all vessels of the United States and by fishing vessels other than vessels of the United States are contained in 50 CFR part 600.

(c) Regulations governing the harvest, possession, landing, purchase, and sale of shark fins are found in 50 CFR part 600 subpart N.

(d) This subpart contains regulations that are common to all western Pacific fisheries managed under Fishery Ecosystem Plans (FEPs) prepared by the Western Pacific Fishery Management Council under the Magnuson-Stevens Act.

(e) Regulations specific to individual areas and fisheries are included in subparts B through F of this part.

(f) Nothing in subparts B through F of this part is intended to supersede any valid state or Federal regulations that are more restrictive than those published here.

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§665.2 Relation to other laws.

NMFS recognizes that any state law pertaining to vessels registered under the laws of that state while operating in the fisheries regulated under this part, that is consistent with this part and the FEPs implemented by this part, shall continue in effect with respect to fishing activities regulated under this part.

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§665.3 Licensing and registration.

Any person who is required to do so by applicable state law or regulation must comply with licensing and registration requirements in the exact manner required by applicable state law or regulation.

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§665.4 Annual catch limits.

(a) *General.* For each fishing year, the Regional Administrator shall specify an annual catch limit, including any overage adjustments, for each stock or stock complex of management unit species defined in subparts B through F of this part, as recommended by the Council, and considering the best available scientific, commercial, and other information about the fishery for that stock or stock complex. The annual catch limit shall serve as the basis for invoking accountability measures in paragraph (f) of this section.

(b) *Overage adjustments.* If landings of a stock or stock complex exceed the specified annual catch limit in a fishing year, the Council will take action in accordance with 50 CFR 600.310(g), which may include recommending that the Regional Administrator reduce the annual catch limit for the subsequent year by the amount of the overage or other measures, as appropriate.

(c) *Exceptions.* The Regional Administrator is not required to specify an annual catch limit for a management unit species that is statutorily excepted from the requirement pursuant to 50 CFR 600.310(h)(2), or that the Council has identified as an ecosystem component species. The Regional Administrator will publish in the FEDERAL REGISTER the list of ecosystem component species, and will publish any changes to the list, as necessary.

(d) *Annual catch target.* For each fishing year, the Regional Administrator may also specify an annual catch target that is below the annual catch limit of a stock or stock complex, as recommended by the Council. When used, the annual catch target shall serve as the basis for invoking accountability measures in paragraph (f) of this section.

(e) *Procedures and timing.* (1) No later than 60 days before the start of a fishing year, the Council shall recommend to the Regional Administrator an annual catch limit, including any overage adjustment, for each stock or stock complex. The recommended limit should be based on a recommendation of the SSC of the acceptable biological catch for each stock or stock complex. The Council may not recommend an annual catch limit that exceeds the acceptable biological catch recommended by the SSC. The Council may also recommend an annual catch target below the annual catch limit.

(2) No later than 30 days before the start of a fishing year, the Regional Administrator shall publish in the FEDERAL REGISTER a notice of the proposed annual catch limit specification and any associated annual catch target, and request public comment.

(3) No later than the start of a fishing year, the Regional Administrator shall publish in the FEDERAL REGISTER and use other methods to notify permit holders of the final annual catch limit specification and any associated annual catch target.

(f) *Accountability measures.* When any annual catch limit or annual catch target is projected to be reached, based on available information, the Regional Administrator shall publish notification to that effect in the FEDERAL REGISTER and shall use other means to notify permit holders.

(1) The notice will include an advisement that fishing for that stock or stock complex will be restricted beginning on a specified date, which shall not be earlier than 7 days after the date of filing the notice for public inspection at the Office of the Federal Register. The restriction may include, but is not limited to, closure of the fishery, closure of specific areas, changes to bag limits, or restrictions in effort. The restriction will remain in effect until the end of the fishing year, except that the Regional Administrator may, based on a recommendation from the Council, remove or modify the restriction before the end of the fishing year.

(2) It is unlawful for any person to conduct fishing in violation of the restrictions specified in the notification issued pursuant to paragraph (f)(1) of this section.

[76 FR 37286, June 27, 2011]

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§§665.5-665.11 [Reserved]

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§665.12 Definitions.

In addition to the definitions in the Magnuson-Stevens Act, §600.10 of this chapter, and subparts B through F of this part, general definitions for western Pacific fisheries have the following meanings:

American Samoa FEP means the Fishery Ecosystem Plan for American Samoa.

Bottomfish FMP means the Fishery Management Plan for Bottomfish and Seamount Groundfish of the Western Pacific Region established in 1986 and replaced by FEPs.

Carapace length means a measurement in a straight line from the ridge between the two largest spines above the eyes, back to the rear edge of the carapace of a spiny lobster (see Figure 1 to this part).

Circle hook means a fishing hook with the point turned perpendicularly back towards the shank.

Commercial fishing means fishing in which the fish harvested, either in whole or in part, are intended to enter commerce or enter commerce through sale, barter, or trade. All lobster fishing in Crustacean Permit Area 1 is considered commercial fishing.

Commonwealth of the Northern Mariana Islands (CNMI) means the Northern Mariana Islands.

Coral Reef Ecosystems FMP means the Fishery Management Plan for Coral Reef Ecosystems of the Western Pacific Region established in 2004 and replaced by FEPs.

Council means the Western Pacific Fishery Management Council.

Crustacean receiving vessel means a vessel of the United States to which lobsters taken in a crustacean management area are transferred from another vessel.

Crustaceans FMP means the Fishery Management Plan for Crustacean Fisheries of the Western Pacific Region established in 1982 and replaced by FEPs.

Currently harvested coral reef taxa (CHCRT) means coral reef associated species, families, or subfamilies, as defined in §§665.121, 665.221, 665.421, and 665.621, that have annual landings greater than 454.54 kg (1,000 lb) as reported on individual state, commonwealth, or territory catch reports or through creel surveys. Fisheries and research data from many of these species have been analyzed by regional management agencies.

Customary exchange means the non-market exchange of marine resources between fishermen and community residents, including family and friends of community residents, for goods, and/or services for cultural, social, or religious reasons. Customary exchange may include cost recovery through monetary reimbursements and other means for actual trip expenses, including but not limited to ice, bait, fuel, or food, that may be necessary to participate in fisheries in the western Pacific. Actual trip expenses do not include expenses that a fisherman would incur without making a fishing trip, including expenses relating to dock space, vessel mortgage payments, routine vessel maintenance, vessel registration fees, safety equipment required by U.S. Coast Guard, and other incidental costs and expenses normally associated with ownership of a vessel.

Dead coral means any precious coral that no longer has any live coral polyps or tissue.

Ecosystem component species means any western Pacific MUS that the Council has identified to be, generally, a non-target species, not determined to be subject to overfishing, approaching overfished, or overfished, not likely to become subject to overfishing or overfished, and generally not retained for sale or personal use.

EFP means an experimental fishing permit.

First level buyer means:

(1) The first person who purchases, with the intention to resell, management unit species, or portions thereof, that were harvested by a vessel that holds a permit or is otherwise regulated under crustacean fisheries in subparts B through E of this part; or

(2) A person who provides recordkeeping, purchase, or sales assistance in the first transaction involving MUS (such as the services provided by a wholesale auction facility).

Fishing gear, as used in regulations for the American Samoa, CNMI, Hawaii, and PRIA bottomfish fisheries in subparts B through E of this part, includes:

(1) Bottom trawl, which means a trawl in which the otter boards or the footrope of the net are in contact with the sea bed;

(2) Gillnet, (see §600.10);

(3) Hook-and-line, which means one or more hooks attached to one or more lines;

(4) Set net, which means a stationary, buoyed, and anchored gill net; and

(5) Trawl, (see §600.10).

Fishing trip means a period of time during which fishing is conducted, beginning when the vessel leaves port and ending when the vessel lands fish.

Fishing year means the year beginning at 0001 local time on January 1 and ending at 2400 local time on December 31, with the exception of fishing for Hawaii Restricted Bottomfish Species and any precious coral MUS.

Freeboard means the straight line vertical distance between a vessel's working deck and the sea surface. If the vessel does not have gunwale door or stern door that exposes the working deck, freeboard means the straight line vertical distance between the top of a vessel's railing and the sea surface.

Harvest guideline means a specified numerical harvest objective.

Hawaiian Archipelago means the Main and Northwestern Hawaiian Islands, including Midway Atoll.

Hawaii FEP means the Fishery Ecosystem Plan for the Hawaiian Archipelago.

Hookah breather means a tethered underwater breathing device that pumps air from the surface through one or more hoses to divers at depth.

Incidental catch or incidental species means species caught while fishing for the primary purpose of catching a different species.

Land or landing means offloading fish from a fishing vessel, arriving in port to begin offloading fish, or causing fish to be offloaded from a fishing vessel.

Large vessel means, as used in this part, any vessel equal to or greater than 50 ft (15.2 m) in length overall.

Length overall (LOA) or length of a vessel as used in this part, means the horizontal distance, rounded to the nearest foot (with any 0.5 foot or 0.15 meter fraction rounded upward), between the foremost part of the stem and the aftermost part of the stern, excluding bowsprits, rudders, outboard motor brackets, and similar fittings or attachments (see Figure 2 to this part). “Stem” is the foremost part of the vessel, consisting of a section of timber or fiberglass, or cast forged or rolled metal, to which the sides of the vessel are united at the fore end, with the lower end united to the keel, and with the bowsprit, if one is present, resting on the upper end. “Stern” is the aftermost part of the vessel.

Live coral means any precious coral that has live coral polyps or tissue.

Live rock means any natural, hard substrate, including dead coral or rock, to which is attached, or which supports, any living marine life form associated with coral reefs.

Low-use marine protected area (MPA) means an area of the U.S. EEZ where fishing operations have specific restrictions in order to protect the coral reef ecosystem, as specified under area restrictions in subparts B through F of this part.

Main Hawaiian Islands (MHI) means the islands of the Hawaii Archipelago lying to the east of 161° W. long.

Mariana Archipelago means Guam and the Northern Mariana Islands.

Mariana FEP means the Fishery Ecosystem Plan for the Mariana Archipelago.

Medium vessel, as used in this part, means any vessel equal to or more than 40 ft (12.2 m) and less than 50 ft (15.2 m) LOA.

Non-commercial fishing means fishing that does not meet the definition of commercial fishing in the Magnuson-Stevens Fishery Conservation and Management Act, and includes, but is not limited to, sustenance, subsistence, traditional indigenous, and recreational fishing.

Non-precious coral means any species of coral other than those listed under the definitions for precious coral in §§665.161, 665.261, 665.461, and 665.661.

Non-selective gear means any gear used for harvesting coral that cannot discriminate or differentiate between types, size, quality, or characteristics of living or dead coral.

Northwestern Hawaiian Islands (NWHI) means the islands of the Hawaiian Archipelago lying to the west of 161° W. long.

No-take MPA means an area of the U.S. EEZ that is closed to fishing for or harvesting of any MUS, as defined in subparts B through F of this part.

Offload means to remove MUS from a vessel.

Offset circle hook means a circle hook in which the barbed end of the hook is displaced relative to the parallel plane of the eyed end, or shank, of the hook when laid on its side.

Owner, as used in the regulations for the crustacean fisheries in subparts B through E of this part and §665.203(i) and (j), means a person who is identified as the current owner of the vessel as described in the Certificate of Documentation (Form CG-1270) issued by the United States Coast Guard (USCG) for a documented vessel, or in a registration certificate issued by a state, a territory, or the USCG for an undocumented vessel. As used in the regulations for the precious coral fisheries in subparts B through E of this part and §665.203(c) through (h), the definition of “owner” in §600.10 of this chapter continues to apply.

Pacific Islands Regional Office (PIRO) means the headquarters of the Pacific Islands Region, NMFS, located at 1845 Wasp Blvd., Bldg. 176, Honolulu, HI 96818; telephone number: 808-725-5000.

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

Pelagics FEP means the Fishery Ecosystem Plan for Pacific Pelagic Fisheries of the Western Pacific Region.

Pelagics FMP means the Fishery Management Plan for Pelagic Fisheries of the Western Pacific Region that was established in 1987 and replaced by the western Pacific pelagic FEP.

Potentially harvested coral reef taxa (PHCRT) means coral reef associated species, families, or subfamilies, as defined in §§665.121, 665.221, 665.421, and 665.621, for which little or no information is available beyond general taxonomic and distribution descriptions. These species have either not been caught in the past or have been harvested annually in amounts less than 454.54 kg (1,000 lb).

Precious Corals FMP means the Fishery Management Plan for Precious Corals of the Western Pacific Region established in 1983 and replaced by fishery ecosystem plans (FEPs).

PRIA FEP means the Fishery Ecosystem Plan for the Pacific Remote Island Areas of Palmyra Atoll, Kingman Reef, Jarvis Island, Baker Island, Howland Island, Johnston Atoll, and Wake Island.

Protected species means an animal protected under the MMPA, as amended, listed under the ESA, as amended, or subject to the Migratory Bird Treaty Act, as amended.

Receiving vessel means a vessel that receives fish or fish products from a fishing vessel, and with regard to a vessel holding a permit under §665.801(e), that also lands western Pacific pelagic MUS taken by other vessels using longline gear.

Recreational fishing means fishing conducted for sport or pleasure, including charter fishing.

Regional Administrator means Regional Administrator, Pacific Islands Region, NMFS (see Table 1 of §600.502 of this chapter for address).

Selective gear means any gear used for harvesting coral that can discriminate or differentiate between type, size, quality, or characteristics of living or dead coral.

Special Agent-In-Charge (SAC) means the Special Agent-In-Charge, NMFS, Pacific Islands Enforcement Division, located at 1845 Wasp Blvd., Bldg. 176, Honolulu, HI 96818; telephone number: 808-725-6100, or a designee.

Special permit means a permit issued to allow fishing for coral reef ecosystem MUS in low-use MPAs or to fish for any PHCRT.

SSC means the Scientific and Statistical Committee of the Western Pacific Fishery Management Council.

State of Hawaii commercial marine license means the license required by the State of Hawaii for anyone to take marine life for commercial purposes (also known as the commercial fishing license).

Transship means to offload or otherwise transfer MUS or products thereof to a receiving vessel.

Trap means a box-like device used for catching and holding lobsters or fish.

U.S. harvested coral means coral caught, taken, or harvested by vessels of the United States within any fishery for which an FMP or FEP has been implemented under the Magnuson-Stevens Act.

Vessel monitoring system unit (VMS unit) means the hardware and software owned by NMFS, installed on vessels by NMFS, and required to track and transmit the positions of certain vessels.

Western Pacific fishery management area means those waters shoreward of the outer boundary of the EEZ around American Samoa, Guam, Hawaii, CNMI, Midway, Johnston and Palmyra Atolls, Kingman Reef, and Wake, Jarvis, Baker, and Howland Islands.

[75 FR 2205, Jan. 14, 2010, as amended at 76 FR 37286, June 27, 2011; 78 FR 33003, June 3, 2013; 79 FR 64111, Oct. 28, 2014]

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§665.13 Permits and fees.

(a) *Applicability.* The requirements for permits for specific western Pacific fisheries are set forth in subparts B through I of this part.

(b) *Validity.* Each permit is valid for fishing only in the specific fishery management areas identified on the permit.

(c) *Application.* (1) An application for a permit to operate in a Federal western Pacific fishery that requires a permit and is regulated under subparts B through I of this part may be obtained from NMFS PIRO. The completed application must be submitted to PIRO for consideration. In no case shall PIRO accept an application that is not on a Federal western Pacific fisheries permit application form.

(2) A minimum of 15 days after the day PIRO receives a complete application should be allowed for processing the application for fisheries under subparts B through I of this part. If an incomplete or improperly completed application is filed, NMFS will notify the applicant of the deficiency. If the applicant fails to correct the deficiency within 30 days following the date of the letter of notification of deficiency, the application will be administratively closed.

(d) *Change in application information.* Any change in the permit application information or vessel documentation, submitted under paragraph (c) of this section, must be reported to PIRO in writing within 15 days of the change to avoid a delay in processing the permit application. A minimum of 10 days from the day the information is received by PIRO should be given for PIRO to record any change in information from the permit application submitted under paragraph (c) of this section. Failure to report such changes may result in a delay in processing an application, permit holders failing to receive important notifications, or sanctions pursuant to the Magnuson-Stevens Act at 16 U.S.C. 1858(g) or 15 CFR part 904, subpart D.

(e) *Issuance.* After receiving a complete application submitted under paragraph (c) of this section, the Regional Administrator will issue a permit to an applicant who is eligible under this part, as appropriate.

(f) *Fees.* (1) PIRO will not charge a fee for a permit issued under §§665.142, 665.162, 665.242, 665.262, 665.442, 665.462, 665.642, or 665.662 of this part, for a Ho'omalu limited access permit issued under §665.203, or for a Guam bottomfish permit issued under §665.404.

(2) PIRO will charge a non-refundable processing fee for each application (including transfer and renewal) for each permit listed in paragraphs (f)(2)(i) through (f)(2)(xiii) of this section. The amount of the fee is calculated in accordance with the procedures of the NOAA Finance Handbook for determining the administrative costs incurred in processing the permit. The fee may not exceed such costs. The appropriate fee is specified with each application form and must accompany each application. Failure to pay the fee will preclude the issuance, transfer, or renewal of any of the following permits:

(i) Hawaii longline limited access permit.

(ii) Mau Zone limited access permit.

(iii) Coral reef ecosystem special permit.

(iv) American Samoa longline limited access permit.

(v) MHI non-commercial bottomfish permit.

(vi) Western Pacific squid jig permit.

(vii) Crustacean permit.

(viii) CNMI commercial bottomfish permit.

(ix) Marianas Trench Monument non-commercial permit.

(x) Marianas Trench Monument recreational charter permit.

(xi) Pacific Remote Islands Monument recreational charter permit.

(xii) Rose Atoll Monument non-commercial permit.

(xiii) Rose Atoll Monument recreational charter permit.

(g) *Expiration.* A permit issued under subparts B through I of this part is valid for the period specified on the permit unless revoked, suspended, transferred, or modified under 15 CFR part 904.

(h) *Replacement.* Replacement permits may be issued, without charge, to replace lost or mutilated permits. An application for a replacement permit is not considered a new application.

(i) *Transfer.* An application for a permit transfer under §§665.203(d), 665.242(e), or 665.801(k), or for registration of a permit for use with a replacement vessel under §665.203(i), must be submitted to PIRO as described in paragraph (c) of this section.

(j) *Alteration.* Any permit that has been altered, erased, or mutilated is invalid.

(k) *Display.* Any permit issued under this subpart, or a facsimile of such permit, must be on board the vessel at all times while the vessel is fishing for, taking, retaining, possessing, or landing MUS shoreward of the outer boundary of the fishery management area. Any permit issued under this section must be displayed for inspection upon request of an authorized officer.

(l) *Sanctions.* Procedures governing sanctions and denials are found at subpart D of 15 CFR part 904.

(m) *Permit appeals.* Procedures for appeals of permitting and administrative actions are specified in the relevant subparts of this part.

[75 FR 2205, Jan. 14, 2010, as amended at 78 FR 33003, June 3, 2013; 78 FR 39583, July 2, 2013]

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§665.14 Reporting and recordkeeping.

(a) Except for precious coral and crustacean fisheries, any person who is required to do so by applicable state law or regulation must make and/or file all reports of MUS landings containing all data and in the exact manner required by applicable state law or regulation.

(b) *Fishing record forms*—(1) *Applicability.* (i) The operator of a fishing vessel subject to the requirements of §§665.124, 665.142, 665.162, 665.203(a)(2), 665.224, 665.242, 665.262, 665.404, 665.424, 665.442, 665.462, 665.603, 665.624, 665.642, 665.662, 665.801, 665.905, 665.935, or 665.965 must maintain on board the vessel an accurate and complete record of catch, effort, and other data on paper report forms provided by the Regional Administrator, or electronically as specified and approved by the Regional Administrator, except as allowed in paragraph (b)(1)(iii) of this section.

(ii) All information specified by the Regional Administrator must be recorded on paper or electronically within 24 hours after the completion of each fishing day. The logbook information, reported

on paper or electronically, for each day of the fishing trip must be signed and dated or otherwise authenticated by the vessel operator in the manner determined by the Regional Administrator, and be submitted or transmitted via an approved method as specified by the Regional Administrator, and as required by this paragraph (b).

(iii) In lieu of the requirements in paragraph (a)(1)(i) of this section, the operator of a fishing vessel registered for use under a Western Pacific squid jig permit pursuant to the requirements of §665.801(g) may participate in a state reporting system. If participating in a state reporting system, all required information must be recorded and submitted in the exact manner required by applicable state law or regulation.

(2) *Timeliness of submission.* (i) If fishing was authorized under a permit pursuant to §§665.142, 665.242, 665.442, 665.404, 665.162, 665.262, 665.462, 665.662, or 665.801, the vessel operator must submit the original logbook information for each day of the fishing trip to the Regional Administrator within 72 hours of the end of each fishing trip, except as allowed in paragraph (iii) of this section.

(ii) If fishing was authorized under a permit pursuant to §665.203(a)(2), the vessel operator or vessel owner must submit the original logbook form for each day of the fishing trip to the Regional Administrator within 72 hours of the end of each fishing trip.

(iii) If fishing was authorized under a PRIA bottomfish permit pursuant to §665.603(a), PRIA pelagic troll and handline permit pursuant to §665.801(f), crustacean fishing permit for the PRIA (Permit Area 4) pursuant to §665.642(a), or a precious coral fishing permit for Permit Area X-P-PI pursuant to §665.662, the original logbook form for each day of fishing within EEZ waters around the PRIA must be submitted to the Regional Administrator within 30 days of the end of each fishing trip.

(iv) If fishing was authorized under a permit pursuant to §§665.124, 665.224, 665.424, 665.624, 665.905, 665.935, or 665.965, the original logbook information for each day of fishing must be submitted to the Regional Administrator within 30 days of the end of each fishing trip.

(c) *Transshipment logbooks.* Any person subject to the requirements of §§665.124(a)(2), 665.224(a)(2), 665.424(a)(2), 665.624(a)(2), or 665.801(e) must maintain on board the vessel an accurate and complete NMFS transshipment logbook containing report forms provided by the Regional Administrator. All information specified on the forms must be recorded on the forms within 24 hours after the day of transshipment. Each form must be signed and dated by the receiving vessel operator. The original logbook for each day of transshipment activity must be submitted to the Regional Administrator within 72 hours of each landing of western Pacific pelagic MUS. The original logbook for each day of transshipment activity must be submitted to the Regional Administrator within 7 days of each landing of coral reef ecosystem MUS.

(d) *Sales report.* The operator of any fishing vessel subject to the requirements of §§665.142, 665.242, 665.442, or 665.642, or the owner of a medium or large fishing vessel subject to the requirements of §665.404(a)(2) must submit to the Regional Administrator, within 72 hours of offloading of crustacean MUS, an accurate and complete sales report on a form provided by the Regional Administrator. The form must be signed and dated by the fishing vessel operator.

(e) *Packing or weigh-out slips.* The operator of any fishing vessel subject to the requirements of §§665.142, 665.242, 665.442, or 665.642 must attach packing or weighout slips provided to the operator by the first-level buyer(s), unless the packing or weighout slips have not been provided in time by the buyer(s).

(f) *Modification of reporting and recordkeeping requirements.* The Regional Administrator may, after consultation with the Council, initiate rulemaking to modify the information to be provided on the fishing

record forms, transshipment logbook, and sales report forms and timeliness by which the information is to be provided, including the submission of packing or weighout slips.

(g) *Availability of records for inspection.* (1) Western Pacific pelagic MUS. Upon request, any fish dealer must immediately provide an authorized officer access to inspect and copy all records of purchases, sales, or other transactions involving western Pacific pelagic MUS taken or handled by longline vessels that have permits issued under this subpart or that are otherwise subject to subpart F of this part, including, but not limited to, information concerning:

(i) The name of the vessel involved in each transaction and the owner and operator of the vessel.

(ii) The weight, number, and size of each species of fish involved in each transaction.

(iii) Prices paid by the buyer and proceeds to the seller in each transaction.

(2) *Crustacean MUS.* Upon request, any first-level buyer must immediately allow an authorized officer and any employee of NMFS designated by the Regional Administrator, to access, inspect, and copy all records relating to the harvest, sale, or transfer of crustacean MUS taken by vessels that have permits issued under this subpart or §§665.140 through 665.145, 665.240 through 665.252, 665.440 through 665.445, or 665.640 through 665.645 of this part. This requirement may be met by furnishing the information on a worksheet provided by the Regional Administrator. The information must include, but is not limited to:

(i) The name of the vessel involved in each transaction and the owner or operator of the vessel.

(ii) The amount, number, and size of each MUS involved in each transaction.

(iii) Prices paid by the buyer and proceeds to the seller in each transaction.

(3) Bottomfish and seamount groundfish MUS. Any person who is required by state laws and regulations to maintain records of landings and sales for vessels regulated by this subpart and by §§665.100 through 665.105, 665.200 through 665.212, 665.400 through 665.407, and 665.600 through 665.606 of this part must make those records immediately available for Federal inspection and copying upon request by an authorized officer.

(4) *Coral reef ecosystem MUS.* Any person who has a special permit and who is required by state laws and regulations to maintain and submit records of catch and effort, landings and sales for coral reef ecosystem MUS by this subpart and §§665.120 through 665.128, 665.220 through 665.228, 665.420 through 665.428, or 665.620 through 665.628 of this part must make those records immediately available for Federal inspection and copying upon request by an authorized officer as defined in §600.10 of this chapter.

(h) *State reporting.* Any person who has a permit under §§665.124, 665.203, 665.224, 665.404, 665.424, 665.603, or 665.624 and who is regulated by state laws and regulations to maintain and submit records of catch and effort, landings and sales for vessels regulated by subparts B through F of this part must maintain and submit those records in the exact manner required by state laws and regulations.

[75 FR 2205, Jan. 14, 2010, as amended at 78 FR 33003, June 3, 2013; 78 FR 39583, July 2, 2013]

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§665.15 Prohibitions.

In addition to the prohibitions in §600.725 of this chapter, it is unlawful for any person to:

(a) Engage in fishing without a valid permit or facsimile of a valid permit on board the vessel and available for inspection by an authorized officer, when a permit is required under §§665.13 or 665.17, unless the vessel was at sea when the permit was issued under §665.13, in which case the permit must be on board the vessel before its next trip.

(b) File false information on any application for a fishing permit under §665.13 or an EFP under §665.17.

(c) Fail to file reports in the exact manner required by any state law or regulation, as required in §665.14.

(d) Falsify or fail to make, keep, maintain, or submit any logbook or logbook form or other record or report required under §§665.14 and 665.17.

(e) Refuse to make available to an authorized officer or a designee of the Regional Administrator for inspection or copying, any records that must be made available in accordance with §665.14.

(f) Fail to affix or maintain vessel or gear markings, as required by §§665.16, 665.128, 665.228, 665.246, 665.428, 665.628, or 665.804.

(g) Violate a term or condition of an EFP issued under §665.17.

(h) Fail to report any take of or interaction with protected species as required by §665.17(k).

(i) Fish without an observer on board the vessel after the owner or agent of the owner has been directed by NMFS to make accommodations available for an observer under §§665.17, 665.105, 665.145, 665.207, 665.247, 665.407, 665.445, 665.606, 665.645, or 665.808.

(j) Refuse to make accommodations available for an observer when so directed by the Regional Administrator under §§665.105, 665.145, 665.207, 665.247, 665.407, 665.445, 665.606, 665.645, or 665.808, or under any provision in an EFP issued under §665.17.

(k) Fail to notify officials as required in §§665.126, 665.144, 665.205, 665.226, 665.244, 665.426, 665.444, 665.626, 665.644, 665.803, or 665.808.

(l) Fish for, take or retain within a no-take MPA, defined in §§665.99, 665.199, 665.399, or 665.599, any bottomfish MUS, crustacean MUS, western Pacific pelagic MUS, precious coral, seamount groundfish or coral reef ecosystem MUS.

(m) Fail to comply with a term or condition governing the vessel monitoring system in violation of §665.19.

(n) Fish for, catch, or harvest MUS without an operational VMS unit on board the vessel after installation of the VMS unit by NMFS, in violation of §665.19(e)(2).

(o) Possess MUS, that were harvested after NMFS has installed the VMS unit on the vessel, on board that vessel without an operational VMS unit, in violation of §665.19(e)(2).

(p) Interfere with, tamper with, alter, damage, disable, or impede the operation of a VMS unit or attempt any of the same; or move or remove a VMS unit without the prior permission of the SAC in violation of §665.19(e)(3).

(q) Make a false statement, oral or written, to an authorized officer, regarding the use, operation, or maintenance of a VMS unit, in violation of §665.19(e).

(r) Interfere with, impede, delay, or prevent the installation, maintenance, repair, inspection, or removal of a VMS unit, in violation of §665.19(e).

(s) Interfere with, impede, delay, or prevent access to a VMS unit by a NMFS observer, in violation of §665.808(f)(4).

(t) Connect or leave connected additional equipment to a VMS unit without the prior approval of the SAC, in violation of §665.19(f).

(u) Fail to comply with the restrictions specified in the notification issued pursuant to §665.4(f)(1), in violation of §665.15(f)(2).

[75 FR 2205, Jan. 14, 2010, as amended at 76 FR 37287, June 27, 2011]

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§665.16 Vessel identification.

(a) Applicability. Each fishing vessel subject to this part, except those identified in paragraph (e) of this section, must be marked for identification purposes, as follows:

(1) A vessel that is registered for use with a valid permit issued under §665.801 and used to fish on the high seas within the Convention Area as defined in §300.211 of this title must be marked in accordance with the requirements at §§300.14 and 300.217 of this title.

(2) A vessel that is registered for use with a valid permit issued under §665.801 of this part and not used to fish on the high seas within the Convention Area must be marked in accordance with either:

(i) Sections 300.14 and 300.217 of this title, or

(ii) Paragraph (b) of this section.

(3) A vessel that is registered for use with a valid permit issued under subparts B through E and subparts G through I of this part must be marked in accordance with paragraph (b) of this section.

(b) Identification. Each vessel subject to this section must be marked as follows:

(1) The vessel's official number must be affixed to the port and starboard sides of the deckhouse or hull, and on an appropriate weather deck, so as to be visible from enforcement vessels and aircraft. Marking must be legible and of a color that contrasts with the background.

(2) For fishing and receiving vessels of 65 ft (19.8 m) LOA or longer, the official number must be displayed in block Arabic numerals at least 18 inches (45.7 cm) in height, except that vessels in precious coral fisheries that are 65 ft (19.8 m) LOA or longer must be marked in block Arabic numerals at least 14 inches (35.6 cm) in height.

(3) For all other vessels, the official number must be displayed in block Arabic numerals at least 10 inches (25.4 cm) in height.

(c) The vessel operator must ensure that the official number is clearly legible and in good repair.

(d) The vessel operator must ensure that no part of the vessel, its rigging, or its fishing gear obstructs the view of the official number from an enforcement vessel or aircraft.

(e) The following fishing vessels are exempt from the vessel identification requirements in this section:

(1) A vessel registered for use under a MHI non-commercial bottomfish permit that is in compliance with State of Hawaii bottomfish vessel registration and marking requirements.

(2) A vessel less than 40 ft (12.2 m) LOA registered for use under a CNMI commercial bottomfish permit that is in compliance with CNMI bottomfish vessel registration and marking requirements.

[75 FR 2205, Jan. 14, 2010, as amended at 75 FR 3417, Jan. 21, 2010; 78 FR 33003, June 3, 2013; 78 FR 39583, July 2, 2013]

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§665.17 Experimental fishing.

(a) *General.* The Regional Administrator may authorize, for limited purposes, the direct or incidental harvest of MUS that would otherwise be prohibited by this part. No experimental fishing may be conducted unless authorized by an EFP issued by the Regional Administrator in accordance with the criteria and procedures specified in this section. EFPs will be issued without charge.

(b) *Observers.* No experimental fishing for crustacean MUS may be conducted unless a NMFS observer is aboard the vessel.

(c) *Application.* An applicant for an EFP must submit to the Regional Administrator at least 60 days before the desired date of the EFP a written application including, but not limited to, the following information:

(1) The date of the application.

(2) The applicant's name, mailing address, and telephone number.

(3) A statement of the purposes and goals of the experiment for which an EFP is needed, including a general description of the arrangements for disposition of all species harvested under the EFP.

(4) A statement of whether the proposed experimental fishing has broader significance than the applicant's individual goals.

(5) For each vessel to be covered by the EFP:

(i) Vessel name.

(ii) Name, address, and telephone number of owner and operator.

(iii) USCG documentation, state license, or registration number.

(iv) Home port.

(v) Length of vessel.

(vi) Net tonnage.

(vii) Gross tonnage.

(6) A description of the species (directed and incidental) to be harvested under the EFP and the amount of such harvest necessary to conduct the experiment.

(7) For each vessel covered by the EFP, the approximate times and places fishing will take place, and the type, size, and amount of gear to be used.

(8) The signature of the applicant.

(d) *Incomplete applications.* The Regional Administrator may request from an applicant additional information necessary to make the determinations required under this section. An applicant will be notified of an incomplete application within 10 working days of receipt of the application. An incomplete application will not be considered until corrected in writing.

(e) *Issuance.* (1) If an application contains all of the required information, NMFS will publish a notice of receipt of the application in the FEDERAL REGISTER with a brief description of the proposal and will give interested persons an opportunity to comment. The Regional Administrator will also forward copies of the application to the Council, the USCG, and the fishery management agency of the affected state, accompanied by the following information:

(i) The current utilization of domestic annual harvesting and processing capacity (including existing experimental harvesting, if any) of the directed and incidental species for which an EFP is being requested.

(ii) A citation of the regulation or regulations that, without the EFP, would prohibit the proposed activity.

(iii) Biological information relevant to the proposal.

(2) At a Council meeting following receipt of a complete application, the Regional Administrator will consult with the Council and the Director of the affected state fishery management agency concerning the permit application. The applicant will be notified in advance of the meeting at which the application will be considered, and invited to appear in support of the application, if the applicant desires.

(3) Within 5 working days after the consultation in paragraph (e)(2) of this section, or as soon as practicable thereafter, NMFS will notify the applicant in writing of the decision to grant or deny the EFP and, if denied, the reasons for the denial. Grounds for denial of an EFP include, but are not limited to, the following:

(i) The applicant has failed to disclose material information required, or has made false statements as to any material fact, in connection with his or her application.

(ii) According to the best scientific information available, the harvest to be conducted under the permit would detrimentally affect any species of fish in a significant way.

(iii) Issuance of the EFP would inequitably allocate fishing privileges among domestic fishermen or would have economic allocation as its sole purpose.

(iv) Activities to be conducted under the EFP would be inconsistent with the intent of this section or the management objectives of the FEP.

(v) The applicant has failed to demonstrate a valid justification for the permit.

(vi) The activity proposed under the EFP would create a significant enforcement problem.

(4) The decision to grant or deny an EFP is final and unappealable. If the permit is granted, NMFS will publish a notice in the FEDERAL REGISTER describing the experimental fishing to be conducted under the EFP. The Regional Administrator may attach terms and conditions to the EFP consistent with the purpose of the experiment including, but not limited to:

(i) The maximum amount of each species that can be harvested and landed during the term of the EFP, including trip limits, where appropriate.

(ii) The number, sizes, names, and identification numbers of the vessels authorized to conduct fishing activities under the EFP.

(iii) The times and places where experimental fishing may be conducted.

(iv) The type, size, and amount of gear which may be used by each vessel operated under the EFP.

(v) The condition that observers be carried aboard vessels operating under an EFP.

(vi) Data reporting requirements.

(vii) Such other conditions as may be necessary to assure compliance with the purposes of the EFP consistent with the objectives of the FEP.

(f) *Duration.* Unless otherwise specified in the EFP or a superseding notice or regulation, an EFP is effective for no longer than one (1) year from the date of issuance, unless revoked, suspended, or modified. EFPs may be renewed following the application procedures in this section.

(g) *Alteration.* Any EFP that has been altered, erased, or mutilated is invalid.

(h) *Transfer.* EFPs issued under subparts B through F of this part are not transferable or assignable. An EFP is valid only for the vessel(s) for which it is issued.

(i) *Inspection.* Any EFP issued under subparts B through F of this part must be carried aboard the vessel(s) for which it was issued. The EFP must be presented for inspection upon request of any authorized officer.

(j) *Sanctions.* Failure of the holder of an EFP to comply with the terms and conditions of an EFP, the provisions of subparts A through F of this part, any other applicable provision of this part, the Magnuson-Stevens Act, or any other regulation promulgated thereunder, is grounds for revocation, suspension, or modification of the EFP with respect to all persons and vessels conducting activities under the EFP. Any

action taken to revoke, suspend, or modify an EFP will be governed by 15 CFR part 904 subpart D. Other sanctions available under the statute will be applicable.

(k) *Protected species.* Persons fishing under an EFP must report any incidental take or fisheries interaction with protected species on a form provided for that purpose. Reports must be submitted to the Regional Administrator within 3 days of arriving in port.

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§665.18 Framework adjustments to management measures.

Framework measures described below for each specific fishery are valid for all management areas, except where specifically noted in this section.

(a) *Pelagic measures*—(1) *Introduction.* Adjustments in management measures may be made through rulemaking if new information demonstrates that there are biological, social, or economic concerns in the fishery. The following framework process authorizes the implementation of measures that may affect the operation of the fisheries, gear, harvest guidelines, or changes in catch and/or effort.

(2) *Annual report.* By June 30 of each year, the Council-appointed pelagics monitoring team will prepare an annual report on the fisheries in the management area. The report shall contain, among other things, recommendations for Council action and an assessment of the urgency and effects of such action(s).

(3) *Procedure for established measures.* (i) Established measures are regulations for which the impacts have been evaluated in Council or NMFS documents in the context of current conditions.

(ii) The Council may recommend to the Regional Administrator that established measures be modified, removed, or reinstituted. Such recommendation shall include supporting rationale and analysis, and shall be made after advance public notice, public discussion, and consideration of public comment. NMFS may implement the Council's recommendation by rulemaking if approved by the Regional Administrator.

(4) *Procedure for new measures.* (i) New measures are regulations for which the impacts have not been evaluated in Council or NMFS documents in the context of current conditions.

(ii) The Council will publicize, including by FEDERAL REGISTER notice, and solicit public comment on, any proposed new management measure. After a Council meeting at which the measure is discussed, the Council will consider recommendations and prepare a FEDERAL REGISTER notice summarizing the Council's deliberations, rationale, and analysis for the preferred action, and the time and place for any subsequent Council meeting(s) to consider the new measure. At subsequent public meeting(s), the Council will consider public comments and other information received to make a recommendation to the Regional Administrator about any new measure. NMFS may implement the Council's recommendation by rulemaking if approved by the Regional Administrator.

(b) *Crustacean measures*—(1) *Introduction.* New management measures may be added through rulemaking if new information demonstrates that there are biological, social, or economic concerns in Permit Areas 1, 2, or 3. The following framework process authorizes the implementation of measures that may affect the operation of the fisheries, gear, harvest guidelines, or changes in catch and/or effort.

(2) *Annual report.* By June 30 of each year, the Council-appointed team will prepare an annual report on the fisheries in the management area. The report shall contain, among other things, recommendations for Council action and an assessment of the urgency and effects of such action(s).

(3) *Procedure for established measures.* (i) Established measures are regulations for which the impacts have been evaluated in Council or NMFS documents in the context of current conditions.

(ii) The Council may recommend to the Regional Administrator that established measures be modified, removed, or reinstituted. Such recommendation shall include supporting rationale and analysis, and shall be made after advance public notice, public discussion, and consideration of public comment. NMFS may implement the Council's recommendation by rulemaking if approved by the Regional Administrator.

(4) *Procedure for new measures.* (i) New measures are regulations for which the impacts have not been evaluated in Council or NMFS documents in the context of current conditions.

(ii) The Council will publicize, including by a FEDERAL REGISTER document, and solicit public comment on, any proposed new management measure. After a Council meeting at which the measure is discussed, the Council will consider recommendations and prepare a FEDERAL REGISTER document summarizing the Council's deliberations, rationale, and analysis for the preferred action, and the time and place for any subsequent Council meeting(s) to consider the new measure. At subsequent public meeting(s), the Council will consider public comments and other information received to make a recommendation to the Regional Administrator about any new measure. NMFS may implement the Council's recommendation by rulemaking if approved by the Regional Administrator.

(c) *Bottomfish measures*—(1) *Annual reports.* By June 30 of each year, a Council-appointed bottomfish monitoring team will prepare an annual report on the fishery by area covering the following topics:

(i) Fishery performance data.

(ii) Summary of recent research and survey results.

(iii) Habitat conditions and recent alterations.

(iv) Enforcement activities and problems.

(v) Administrative actions (*e.g.,* data collection and reporting, permits).

(vi) State and territorial management actions.

(vii) Assessment of need for Council action (including biological, economic, social, enforcement, administrative, and state/Federal needs, problems, and trends). Indications of potential problems warranting further investigation may be signaled by the following indicator criteria:

(A) Mean size of the catch of any species in any area is a pre-reproductive size.

(B) Ratio of fishing mortality to natural mortality for any species.

(C) Harvest capacity of the existing fleet and/or annual landings exceed best estimate of MSY in any area.

(D) Significant decline (50 percent or more) in bottomfish catch per unit of effort from baseline levels.

(E) Substantial decline in ex-vessel revenue relative to baseline levels.

(F) Significant shift in the relative proportions of gear in any one area.

(G) Significant change in the frozen/fresh components of the bottomfish catch.

(H) Entry/exit of fishermen in any area.

(I) Per-trip costs for bottomfish fishing exceed per-trip revenues for a significant percentage of trips.

(J) Significant decline or increase in total bottomfish landings in any area.

(K) Change in species composition of the bottomfish catch in any area.

(L) Research results.

(M) Habitat degradation or environmental problems.

(N) Reported interactions between bottomfish fishing operations and protected species in the NWHI.

(viii) Recommendations for Council action.

(ix) Estimated impacts of recommended action.

(2) *Recommendation of management action.* (i) The team may present management recommendations to the Council at any time. Recommendations may cover actions suggested for Federal regulations, state/territorial action, enforcement or administrative elements, and research and data collection. Recommendations will include an assessment of urgency and the effects of not taking action.

(ii) The Council will evaluate the team's reports and recommendations, and the indicators of concern. The Council will assess the need for one or more of the following types of management action: Catch limits, size limits, closures, effort limitations, access limitations, or other measures.

(iii) The Council may recommend management action by either the state/territorial governments or by Federal regulation.

(3) *Federal management action.* (i) If the Council believes that management action should be considered, it will make specific recommendations to the Regional Administrator after requesting and considering the views of its Scientific and Statistical Committee and Bottomfish Advisory Panel and obtaining public comments at a public hearing.

(ii) The Regional Administrator will consider the Council's recommendation and accompanying data, and, if he or she concurs with the Council's recommendation, will propose regulations to carry out the action. If the Regional Administrator rejects the Council's proposed action, a written explanation for the denial will be provided to the Council within 2 weeks of the decision.

(iii) The Council may appeal a denial by writing to the Assistant Administrator, who must respond in writing within 30 days.

(iv) The Regional Administrator and the Assistant Administrator will make their decisions in accord with the Magnuson-Stevens Act, other applicable law, and the bottomfish measures of the FEPs.

(v) To minimize conflicts between the Federal and state management systems, the Council will use the procedures in paragraph (c)(2) of this section to respond to state/territorial management actions.

Council consideration of action would normally begin with a representative of the state or territorial government bringing a potential or actual management conflict or need to the Council's attention.

(4) *Access limitation procedures.* (i) Access limitation may be adopted under this paragraph (c)(4) only for the NWHI, American Samoa, and Guam.

(ii) If access limitation is proposed for adoption or subsequent modification through the process described in this paragraph (c)(4), the following requirements must be met:

(A) The bottomfish monitoring team must consider and report to the Council on present participation in the fishery; historical fishing practices in, and dependence on, the fishery; economics of the fishery; capability of fishing vessels used in the fishery to engage in other fisheries; cultural and social framework relevant to the fishery; and any other relevant considerations.

(B) Public hearings must be held specifically addressing the limited access proposals.

(C) A specific advisory subpanel of persons experienced in the fishing industry will be created to advise the Council and the Regional Administrator on administrative decisions.

(D) The Council's recommendation to the Regional Administrator must be approved by a two-thirds majority of the voting members.

(5) *Five-year review.* The Council will conduct a comprehensive review on the effectiveness of the Mau Zone limited access program 5 years following implementation of the program. The Council will consider the extent to which the FEP objectives have been met and verify that the target number of vessels established for the fishery is appropriate for current fishing activity levels, catch rates, and biological condition of the stocks. The Council may establish a new target number based on the 5-year review.

(d) *Precious coral measures*—(1) *Introduction.* Established management measures may be revised and new management measures may be established and/or revised through rulemaking if new information demonstrates that there are biological, social, or economic concerns in a precious coral permit area. The following framework process authorizes the implementation of measures that may affect the operation of the fisheries, gear, quotas, season, or levels of catch and/or in effort.

(2) *Annual report.* By June 30 of each year, the Council-appointed precious coral team will prepare an annual report on the fisheries in the management area. The report will contain, among other things, recommendations for Council action and an assessment of the urgency and effects of such action(s).

(3) *Procedure for established measures.* (i) Established measures are regulations for which the impacts have been evaluated in Council or NMFS documents in the context of current conditions.

(ii) The Council may recommend to the Regional Administrator that established measures be modified, removed, or reinstituted. Such recommendation will include supporting rationale and analysis and will be made after advance public notice, public discussion, and consideration of public comment. NMFS may implement the Council's recommendation by rulemaking if approved by the Regional Administrator.

(4) *Procedure for new measures.* (i) New measures are regulations for which the impacts have not been evaluated in Council or NMFS documents in the context of current conditions.

(ii) The Council will publicize, including by a FEDERAL REGISTER document, and solicit public comment on, any proposed new management measure. After a Council meeting at which the measure is

discussed, the Council will consider recommendations and prepare a FEDERAL REGISTER document summarizing the Council's deliberations, rationale, and analysis for the preferred action and the time and place for any subsequent Council meeting(s) to consider the new measure. At a subsequent public meeting, the Council will consider public comments and other information received before making a recommendation to the Regional Administrator about any new measure. If approved by the Regional Administrator, NMFS may implement the Council's recommendation by rulemaking.

(e) *Coral reef ecosystem measures*—(1) *Procedure for established measures.* (i) Established measures are regulations for which the impacts have been evaluated in Council or NMFS documents in the context of current conditions.

(ii) The Council may recommend to the Regional Administrator that established measures be modified, removed, or reinstituted. Such recommendation shall include supporting rationale and analysis, and shall be made after advance public notice, public discussion and consideration of public comment. NMFS may implement the Council's recommendation by rulemaking if approved by the Regional Administrator.

(2) *Procedure for new measures.* (i) New measures are regulations for which the impacts have not been evaluated in Council or NMFS documents in the context of current conditions. New measures include, but are not limited to, catch limits, resource size limits, closures, effort limitations, reporting and recordkeeping requirements.

(ii) The Regional Administrator will publicize, including by FEDERAL REGISTER notice, and solicit public comment on, any proposed new management measure. After a Council meeting at which the measure is discussed, the Council will consider recommendations and prepare a document summarizing the Council's deliberations, rationale, and analysis for the preferred action, and the time and place for any subsequent Council meeting(s) to consider the new measure. At subsequent public meeting(s), the Council will consider public comments and other information received to make a recommendation to the Regional Administrator about any new measure. NMFS may implement the Council's recommendation by rulemaking if approved by the Regional Administrator.

(A) The Regional Administrator will consider the Council's recommendation and supporting rationale and analysis, and, if the Regional Administrator concurs with the Council's recommendation, will propose regulations to carry out the action. If the Regional Administrator rejects the Council's proposed action, the Regional Administrator will provide a written explanation for the denial within 2 weeks of the decision.

(B) The Council may appeal a denial by writing to the Assistant Administrator, who must respond in writing within 30 days.

(C) The Regional Administrator and the Assistant Administrator will make their decisions in accordance with the Magnuson-Stevens Act, other applicable laws, and the FEPs.

(D) To minimize conflicts between the Federal and state/territorial/commonwealth management systems, the Council will use the procedures in this paragraph (e)(2)(ii) to respond to state/territorial/commonwealth management actions. The Council's consideration of action would normally begin with a representative of the state, territorial or commonwealth government bringing a potential or actual management conflict or need to the Council's attention.

(3) *Annual report.* By July 31 of each year, a Council-appointed coral reef ecosystem monitoring team will prepare an annual report on coral reef fisheries of the western Pacific region. The report will contain, among other things:

(i) Fishery performance data, summaries of new information and assessments of need for Council action.

(ii) Recommendation for Council action. The Council will evaluate the annual report and advisory body recommendations and may recommend management action by either the state/territorial/commonwealth governments or by Federal regulation.

(iii) If the Council believes that management action should be considered, it will make specific recommendations to the Regional Administrator after considering the views of its advisory bodies.

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§665.19 Vessel monitoring system.

(a) *Applicability.* The holder of any of the following permits is subject to the vessel monitoring system requirements in this part:

(1) Hawaii longline limited access permit issued pursuant to §665.801(b);

(2) American Samoa longline limited entry permit, for vessel size Class C or D, issued pursuant to §665.801(c);

(3) Vessels permitted to fish in Crustacean Permit Area 1 VMS Subarea; or

(4) CNMI commercial bottomfish permit, if the vessel is a medium or large bottomfish vessel, issued pursuant to §665.404(a)(2).

(b) *VMS unit.* Only a VMS unit owned by NMFS and installed by NMFS complies with the requirement of this subpart.

(c) *Notification.* After a permit holder subject to §665.19(a) has been notified by the SAC of a specific date for installation of a VMS unit on the permit holder's vessel, the vessel must carry and operate the VMS unit after the date scheduled for installation.

(d) *Fees and charges.* During the experimental VMS program, the holder of a permit subject to §665.19(a) shall not be assessed any fee or other charges to obtain and use a VMS unit, including the communication charges related directed to requirements under this section. Communication charges related to any additional equipment attached to the VMS unit by the owner or operator shall be the responsibility of the owner or operator and not NMFS.

(e) *Permit holder duties.* The holder of a permit subject to §665.19(a) and master of the vessel must:

(1) Provide opportunity for the SAC to install and make operational a VMS unit after notification.

(2) Carry and continuously operate the VMS unit on board whenever the vessel is at sea.

(3) Not remove, relocate, or make non-operational the VMS unit without prior approval from the SAC.

(f) *Authorization by the SAC.* The SAC has authority over the installation and operation of the VMS unit. The SAC may authorize the connection or order the disconnection of additional equipment, including a computer, to any VMS unit when deemed appropriate by the SAC.

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§665.20 Western Pacific Community Development Program.

(a) *General.* In accordance with the criteria and procedures specified in this section, the Regional Administrator may authorize the direct or incidental harvest of management unit species that would otherwise be prohibited by this part.

(b) *Eligibility.* To be eligible to participate in the western Pacific community development program, a community must meet the following criteria:

(1) Be located in American Samoa, Guam, Hawaii, or the Northern Mariana Islands (collectively, the western Pacific);

(2) Consist of community residents descended from aboriginal people indigenous to the western Pacific who conducted commercial or subsistence fishing using traditional fishing practices in the waters of the western Pacific;

(3) Consist of individuals who reside in their ancestral homeland;

(4) Have knowledge of customary practices relevant to fisheries of the western Pacific;

(5) Have a traditional dependence on fisheries of the western Pacific;

(6) Are currently experiencing economic or other constraints that have prevented full participation in the western Pacific fisheries and, in recent years, have not had harvesting, processing or marketing capability sufficient to support substantial participation in fisheries in the area; and

(7) Develop and submit a community development plan to the Council and the NMFS that meets the requirements in paragraph (c) of this section.

(c) *Community development plan.* An eligible community seeking access to a fishery under the authority of the Council and NMFS must submit to the Council a community development plan that includes, but is not limited to, the following information:

(1) A statement of the purposes and goals of the plan.

(2) A description and justification for the specific fishing activity being proposed, including:

(i) Location of the proposed fishing activity.

(ii) Management unit species to be harvested, and any potential bycatch.

(iii) Gear type(s) to be used.

(iv) Frequency and duration of the proposed fishing activity.

(3) A statement describing the degree of involvement by the indigenous community members, including the name, address, telephone and other contact information of each individual conducting the proposed fishing activity.

(4) A description of how the community and or its members meet each of the eligibility criteria in paragraph (b) of this section.

(5) If a vessel is to be used by the community to conduct fishing activities, for each vessel:

(i) Vessel name and official number (USCG documentation, state, territory, or other registration number).

(ii) Vessel length overall, displacement, and fish holding capacity.

(iii) Any valid federal fishing permit number(s).

(iv) Name, address, and telephone number of the vessel owner(s) and operator(s).

(d) *Council review.* The Council will review each community development plan to ensure that it meets the intent of the Magnuson-Stevens Act and contains all required information. The Council may consider advice of its advisory panels in conducting this review. If the Council finds the community development plan is complete, it will transmit the plan to the Regional Administrator for review.

(e) *Agency review and approval.* (1) Upon receipt of a community development plan from the Council, the Regional Administrator will review the plan for consistency with paragraphs (b), (c), and (d) of this section, and other applicable laws. The Regional Administrator may request from the applicant additional information necessary to make the determinations pursuant to this section and other applicable laws before proceeding with the review pursuant to paragraph (e)(2) of this section.

(2) If the Regional Administrator determines that a plan contains the required information and is consistent with paragraphs (b), (c), and (d) of this section, and other applicable laws, NMFS will publish a notice in the FEDERAL REGISTER to solicit public comment on the proposed plan and any associated environmental review documents. The notice will include the following:

(i) A description of the fishing activity to be conducted.

(ii) The current utilization of domestic annual harvesting and processing capacity (including existing experimental harvesting, if any) of the target, incidental, and bycatch species.

(iii) A summary of any regulations that would otherwise prohibit the proposed fishing activity.

(iv) Biological and environmental information relevant to the plan, including appropriate statements of environmental impacts on target and non-target stocks, marine mammals, and threatened or endangered species.

(3) Within 90 days from the end of the comment period on the plan, the Regional Administrator will notify the applicant in writing of the decision to approve or disapprove the plan.

(4) If disapproved, the Regional Administrator will provide the reasons for the plan's disapproval and provide the community with the opportunity to modify the plan and resubmit it for review. Reasons for disapproval may include, but are not limited to, the following:

(i) The applicant failed to disclose material information or made false statements related to the plan.

(ii) The harvest would contribute to overfishing or would hinder the recovery of an overfished stock, according to the best scientific information available.

(iii) The activity would be inconsistent with an applicable law.

(iv) The activity would create a significant enforcement, monitoring, or administrative problem, as determined by the Regional Administrator.

(5) If approved, the Regional Administrator will publish a notice of the authorization in the FEDERAL REGISTER, and may attach limiting terms and conditions to the authorization including, but not limited to, the following:

(i) The maximum amount of each management unit species and potential bycatch species that may be harvested and landed during the term of the authorization.

(ii) The number, sizes, names, identification numbers, and federal permit numbers of the vessels authorized to conduct fishing activities.

(iii) Type, size, and amount of gear used by each vessel, including trip limits.

(iv) The times and places where fishing may or may not be conducted.

(v) Notification, observer, vessel monitoring, and reporting requirements.

(f) *Duration.* Unless otherwise specified, and unless revoked, suspended, or modified, a plan may be effective for no longer than five years.

(g) *Transfer.* Plans authorized under this section are not transferable or assignable.

(h) *Sanctions.* The Regional Administrator may revoke, suspend or modify a community development plan in the case of failure to comply with the terms and conditions of the plan, any other applicable provision of this part, the Magnuson-Stevens Act, or other applicable laws.

(i) *Program review.* NMFS and the Council will periodically review and assess each plan. If fishery, environmental, or other conditions have changed such that the plan's goals or requirements are not being met, or the fishery has become in an overfished state or overfishing is occurring, the Regional Administrator may revoke, suspend, or modify the plan.

[75 FR 54046, Sept. 3, 2010]

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§665.598 Management area.

The PRIA fishery management area is the EEZ seaward of Palmyra Atoll, Kingman Reef, Jarvis Island, Baker Island, Howland Island, Johnston Atoll, and Wake Island, Pacific Remote Island Areas with the inner boundary a line coterminous with the seaward boundaries of the above atolls, reefs and islands PRIA and the outer boundary a line drawn in such a manner that each point on it is 200 nautical miles from the baseline from which the territorial sea is measured, or is coterminous with adjacent international maritime boundaries.

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§665.599 Area restrictions.

Except as provided in §665.934, fishing is prohibited in all no-take MPAs. The following U.S. EEZ waters are no-take MPAs: Landward of the 50 fathom curve at Jarvis, Howland, and Baker Islands, and Kingman Reef; as depicted on National Ocean Survey Chart Numbers 83116 and 83153.

[78 FR 33003, June 3, 2013]

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§665.600 PRIA bottomfish fisheries. [Reserved]

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§665.601 Definitions.

As used in §§665.600 through 665.619:

PRIA bottomfish fishing permit means the permit required by §665.603 to use a vessel to fish for PRIA bottomfish MUS in the EEZ around the PRIA, or to land bottomfish MUS shoreward of the outer boundary of the EEZ around the PRIA, with the exception of EEZ waters around Midway Atoll.

PRIA bottomfish management unit species (PRIA bottomfish MUS) means the following fish:

English common name	Scientific name
Silver jaw jobfish	*Aphareus rutilans.*
Giant trevally	*Caranx ignobilis.*
Black jack	*Caranx lugubris.*
Blacktip grouper	*Epinephelus fasciatus.*
Sea bass	*Epinephelus quernus.*
Red snapper	*Etelis carbunculus.*
Longtail snapper	*Etelis coruscans.*
Redgill emperor	*Lethrinus rubrioperculatus.*
Yellowtail snapper	*Pristipomoides auricilla.*
Pink snapper	*Pristipomoides filamentosus.*
Pink snapper	*Pristipomoides seiboldii.*
Lunartail, lyretail grouper	*Variola louti.*

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§665.602 [Reserved]

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§665.603 Permits.

(a) *Applicability.* PRIA. The owner of any vessel used to fish for, land, or transship PRIA bottomfish MUS shoreward of the outer boundary of the PRIA subarea must have a permit issued under this section, and the permit must be registered for use with that vessel.

(b) *Submission.* An application for a permit required under this section must be submitted to PIRO as described in §665.13.

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§665.604 Prohibitions.

In addition to the general prohibitions specified in §600.725 of this chapter and §665.16, it is unlawful for any person to do any of the following:

(a) Fish for PRIA bottomfish MUS using gear prohibited under §665.605.

(b) Fish for, or retain on board a vessel, PRIA bottomfish MUS in the PRIA without the appropriate permit registered for use with that vessel issued under §665.13.

(c) Falsify or fail to make or file all reports of PRIA bottomfish MUS landings taken in the PRIA, containing all data in the exact manner, as specified in §665.14(b).

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§665.605 Gear restrictions.

(a) *Bottom trawls and bottom set gillnets.* Fishing for PRIA bottomfish MUS with bottom trawls and bottom set gillnets is prohibited.

(b) *Possession of gear.* Possession of a bottom trawl and bottom set gillnet by any vessel having a permit under §665.603 or otherwise established to be fishing for PRIA bottomfish MUS in the PRIA fishery management area is prohibited.

(c) *Poisons and explosives.* The possession or use of any poisons, explosives, or intoxicating substances for the purpose of harvesting PRIA bottomfish is prohibited.

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§665.606 At-sea observer coverage.

All fishing vessels subject to §§665.600 through 665.606 must carry an observer when directed to do so by the Regional Administrator.

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§§665.607-665.619 [Reserved]

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§665.620 PRIA coral reef ecosystem fisheries. [Reserved]

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§665.621 Definitions.

As used in §§665.620 through 665.639:

PRIA coral reef ecosystem management unit species (PRIA coral reef ecosystem MUS) means all of the Currently Harvested Coral Reef Taxa and Potentially Harvested Coral Reef Taxa listed in this section and which spend the majority of their non-pelagic (post-settlement) life stages within waters less than or equal to 50 fathoms in total depth.

PRIA Currently Harvested Coral Reef Taxa:

Family name	English common name	Scientific name
Acanthuridae (Surgeonfishes)	orange-spot	*Acanthurus olivaceus.*
	surgeonfish	
	yellowfin surgeonfish	*Acanthurus xanthopterus.*
	convict tang	*Acanthurus triostegus.*
	eye-striped surgeonfish	*Acanthurus dussumieri.*
	blue-lined surgeon	*Acanthurus nigroris.*
	Whitebar surgeonfish	*Acanthurus leucopareius.*
	blue-banded surgeonfish	*Acanthurus lineatus.*
	blackstreak surgeonfish	*Acanthurus nigricauda.*
	whitecheek surgeonfish	*Acanthurus nigricans.*
	white-spotted surgeonfish	*Acanthurus guttatus.*
	Ringtail surgeonfish	*Acanthurus blochii.*
	brown surgeonfish	*Acanthurus nigrofuscus.*
	yellow-eyed surgeonfish	*Ctenochaetus strigosus.*
	striped bristletooth	*Ctenochaetus striatus.*
	twospot bristletooth	*Ctenochaetus binotatus.*
	Yellow tang	*Zebrasoma flavescens.*
	bluespine unicornfish	*Naso unicornus.*
	orangespine unicornfish	*Naso lituratus.*
	black tongue unicornfish	*Naso hexacanthus.*

	bignose unicornfish	*Naso vlamingii.*
	whitemargin unicornfish	*Naso annulatus.*
	spotted unicornfish	*Naso brevirostris.*
Labridae (Wrasses)	Napoleon wrasse	*Cheilinus undulatus.*
	Triple-tail wrasse	*Cheilinus trilobatus.*
	Floral wrasse	*Cheilinus chlorourus.*
	ring-tailed wrasse	*Oxycheilinus unifasciatus.*
	bandcheek wrasse	*Oxycheilinus diagrammus.*
	Barred thicklip	*Hemigymnus fasciatus.*
	three-spot wrasse	*Halichoeres trimaculatus.*
	red ribbon wrasse	*Thalassoma quinquevittatum.*
	Sunset wrasse	*Thalassoma lutescens.*
Mullidae (Goatfishes)	Yellow goatfish	*Mulloidichthys.* spp.
	Orange goatfish	*Mulloidichthys pfleugeri.*
	yellowstripe goatfish	*Mulloidichthys flavolineatus.*
	Banded goatfish	*Parupeneus.* spp.
Mullidae (Goatfishes)	dash-dot goatfish	*Parupeneus barberinus.*
	yellowsaddle goatfish	*Parupeneus cyclostomas.*
	multi-barred goatfish	*Parupeneus multifaciatus.*
	bantail goatfish	*Upeneus arge.*
Mugilidae (Mullets)	fringelip mullet	*Crenimugil crenilabis.*
	engel's mullet	*Moolgarda engeli.*
	false mullet	*Neomyxus leuciscus.*
Muraenidae (Moray eels)	yellowmargin moray eel	*Gymnothorax flavimarginatus.*
	giant moray eel	*Gymnothorax javanicus.*
	undulated moray eel	*Gymnothorax undulatus.*
Octopodidae	Octopus	*Octopus cyanea.*
	Octopus	*Octopus ornatus.*
Pricanthidae (Bigeye)	Glasseye	*Heteropriacanthus cruentatus.*
Scaridae (Parrotfishes)	Humphead parrotfish	*Bolbometopon muricatum.*

	parrotfish	*Scarus.* spp.
	pacific longnose parrotfish	*Hipposcarus longiceps.*
	stareye parrotfish	*Calotomus carolinus.*
Scombridae	Dogtooth tuna	*Gymnosarda unicolor.*
Sphyraenidae (Barracuda)	great barracuda	*Sphyraena barracuda.*

PRIA Potentially Harvested Coral Reef Taxa:

English common name	Scientific name
wrasses (Those species not listed as CHCRT)	Labridae.
sharks (Those species not listed as CHCRT)	Carcharhinidae, Sphyrnidae.
rays and skates	Myliobatidae, Mobulidae.
groupers (Those species not listed as CHCRT or as BMUS)	Serrandiae.
jacks and scads (Those species not listed as CHCRT or as BMUS)	Carangidae.
solderfishes and squirrelfishes (Those species not listed as CHCRT)	Holocentridae.
goatfishes (Those species not listed as CHCRT)	Mullidae.
Batfishes	Ephippidae.
Sweetlips	Haemulidae.
Remoras	Echeneidae.
Tilefishes	Malacanthidae.
Dottybacks	Pseudochromidae.
Prettyfins	Plesiopidae.
surgeonfishes (Those species not listed as CHCRT)	Acanthuridae.
emperors (Those species not listed as CHCRT or as BMUS)	Lethrinidae.
Herrings	Clupeidae.
Gobies	Gobiidae.
snappers (Those species not listed as CHCRT or as BMUS)	Lutjanidae.
trigger fishes (Those species not listed as CHCRT)	Balistidae.

rabbitfishes (Those species not listed as CHCRT)	Siganidae.
eels (Those species not listed as CHCRT)	Muraenidae, Chlopsidae, Congridae, Ophichthidae.
Cardinalfishes	Apogonidae.
moorish idols	Zanclidae.
butterfly fishes	Chaetodontidae.
Angelfishes	Pomacanthidae.
Damselfishes	Pomacentridae.
Scorpionfishes	Scorpaenidae.
Blennies	Blenniidae.
barracudas (Those species not listed as CHCRT)	Sphyraenidae.
Sandperches	Pinguipedidae.
rudderfishes (Those species not listed as CHCRT)	Kyphosidae.
Fusiliers	Caesionidae.
hawkfishes (Those species not listed as CHCRT)	Cirrhitidae.
Frogfishes	Antennariidae.
pipefishes, seahorses	Syngnathidae.
flounders, soles	Bothidae.
Trunkfishes	Ostraciidae.
puffer fishes, porcupine fishes	Tetradontidae.
Trumpetfish	*Aulostomus chinensis.*
Cornetfish	*Fistularia commersoni.*
blue corals	Heliopora.
organpipe corals	Tubipora.
ahermatypic corals	Azooxanthellates.
mushroom corals	Fungiidae.
small and large coral polyps	
fire corals	Millepora.
soft corals, gorgonians	
Anemones	Actinaria.
soft zoanthid corals	Zoanthinaria.

	Hydrozoans, Bryzoans.
sea squirts	Tunicates.
sea cucumbers and sea urchins	Echinoderms.
Those species not listed as CHCRT	Mollusca.
sea snails	Gastropoda.
	Trochus.
sea slugs	Opistobranchs.
black lipped pearl oyster	*Pinctada margaritifera.*
giant clam	Tridacnidae.
other clams	Other Bivalves.
	Cephalopods.
lobsters, shrimps/mantis shrimps, true crabs and hermit crabs (Those species not listed as CMUS)	Crustaceans.
Sponges	Porifera.
lace corals	Stylasteridae.
hydroid corals	Solanderidae.
segmented worms	Annelids.
Seaweed	Algae.
Live rock.	
All other PRIA coral reef ecosystem MUS that are marine plants, invertebrates, and fishes that are not listed in the PRIA CHCRT table or are not PRIA bottomfish, crustacean, precious coral, or western Pacific pelagic MUS.	

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§665.622 [Reserved]

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§665.623 Relation to other laws.

To ensure consistency between the management regimes of different Federal agencies with shared management responsibilities of fishery resources within the PRIA fishery management area, fishing for PRIA coral reef ecosystem MUS is not allowed within the boundary of a National Wildlife Refuge unless specifically authorized by the USFWS, regardless of whether that refuge was established by action of the President or the Secretary of the Interior.

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§665.624 Permits and fees.

(a) *Applicability.* Unless otherwise specified in this subpart, §665.13 applies to coral reef ecosystem permits.

(1) *Special permit.* Any person of the United States fishing for, taking or retaining PRIA coral reef ecosystem MUS must have a special permit if they, or a vessel which they operate, is used to fish for any:

(i) [Reserved]

(ii) PRIA Potentially Harvested Coral Reef Taxa in the PRIA coral reef ecosystem management area; or

(iii) PRIA Coral reef ecosystem MUS in the PRIA coral reef ecosystem management area with any gear not specifically allowed in this subpart.

(2) *Transshipment permit.* A receiving vessel must be registered for use with a transshipment permit if that vessel is used in the PRIA coral reef ecosystem management area to land or transship PRIA PHCRT, or any PRIA coral reef ecosystem MUS harvested within low-use MPAs.

(3) *Exceptions.* The following persons are not required to have a permit under this section:

(i) Any person issued a permit to fish under any FEP who incidentally catches PRIA coral reef ecosystem MUS while fishing for bottomfish MUS, crustacean MUS, western Pacific pelagic MUS, precious coral, or seamount groundfish.

(ii) Any person fishing for PRIA CHCRT outside of an MPA, who does not retain any incidentally caught PRIA PHCRT.

(iii) Any person collecting marine organisms for scientific research as described in §665.17, or §600.745 of this chapter.

(b) *Validity.* Each permit will be valid for fishing only in the fishery management area specified on the permit.

(c) *General requirements.* General requirements governing application information, issuance, fees, expiration, replacement, transfer, alteration, display, sanctions, and appeals for permits are contained in §665.13.

(d) *Special permit.* The Regional Administrator shall issue a special permit in accordance with the criteria and procedures specified in this section.

(1) *Application.* An applicant for a special or transshipment permit issued under this section must complete and submit to the Regional Administrator a Special Coral Reef Ecosystem Fishing Permit Application Form issued by NMFS. Information in the application form must include, but is not limited to, a statement describing the objectives of the fishing activity for which a special permit is needed, including a general description of the expected disposition of the resources harvested under the permit (*i.e.,* stored live, fresh, frozen, preserved; sold for food, ornamental, research, or other use; and a description of the planned fishing operation, including location of fishing and gear operation, amount and species (directed and incidental) expected to be harvested and estimated habitat and protected species impacts).

(2) *Incomplete applications.* The Regional Administrator may request from an applicant additional information necessary to make the determinations required under this section. An applicant will be notified of an incomplete application within 10 working days of receipt of the application. An incomplete application will not be considered until corrected and completed in writing.

(3) *Issuance.* (i) If an application contains all of the required information, the Regional Administrator will forward copies of the application within 30 days to the Council, the USCG, the fishery management agency of the affected state, and other interested parties who have identified themselves to the Council, and the USFWS.

(ii) Within 60 days following receipt of a complete application, the Regional Administrator will consult with the Council through its Executive Director, USFWS, and the Director of the affected state fishery management agency concerning the permit application and will receive their recommendations for approval or disapproval of the application based on:

(A) Information provided by the applicant;

(B) The current domestic annual harvesting and processing capacity of the directed and incidental species for which a special permit is being requested;

(C) The current status of resources to be harvested in relation to the overfishing definition in the FEP;

(D) Estimated ecosystem, habitat, and protected species impacts of the proposed activity; and

(E) Other biological and ecological information relevant to the proposal. The applicant will be provided with an opportunity to appear in support of the application.

(iii) Following a review of the Council's recommendation and supporting rationale, the Regional Administrator may:

(A) Concur with the Council's recommendation and, after finding that it is consistent with the goals and objectives of the FEP, the national standards, the Endangered Species Act, and other applicable laws, approve or deny a special permit; or

(B) Reject the Council's recommendation, in which case, written reasons will be provided by the Regional Administrator to the Council for the rejection.

(iv) If the Regional Administrator does not receive a recommendation from the Council within 60 days of Council receipt of the permit application, the Regional Administrator can make a determination of approval or denial independently.

(v) Within 30 working days after the consultation in paragraph (d)(3)(ii) of this section, or as soon as practicable thereafter, NMFS will notify the applicant in writing of the decision to grant or deny the special permit and, if denied, the reasons for the denial. Grounds for denial of a special permit include the following:

(A) The applicant has failed to disclose material information required, or has made false statements as to any material fact, in connection with his or her application.

(B) According to the best scientific information available, the directed or incidental catch in the season or location specified under the permit would detrimentally affect any coral reef resource or coral

reef ecosystem in a significant way, including, but not limited to issues related to, spawning grounds or seasons, protected species interactions, EFH, and habitat areas of particular concern (HAPC).

(C) Issuance of the special permit would inequitably allocate fishing privileges among domestic fishermen or would have economic allocation as its sole purpose.

(D) The method or amount of harvest in the season and/or location stated on the permit is considered inappropriate based on previous human or natural impacts in the given area.

(E) NMFS has determined that the maximum number of permits for a given area in a given season has been reached and allocating additional permits in the same area would be detrimental to the resource.

(F) The activity proposed under the special permit would create a significant enforcement problem.

(vi) The Regional Administrator may attach conditions to the special permit, if it is granted, consistent with the management objectives of the FEP, including but not limited to:

(A) The maximum amount of each resource that can be harvested and landed during the term of the special permit, including trip limits, where appropriate.

(B) The times and places where fishing may be conducted.

(C) The type, size, and amount of gear which may be used by each vessel operated under the special permit.

(D) Data reporting requirements.

(E) Such other conditions as may be necessary to ensure compliance with the purposes of the special permit consistent with the objectives of the FEP.

(4) Appeals of permit actions.

(i) Except as provided in subpart D of 15 CFR part 904, any applicant for a permit or a permit holder may appeal the granting, denial, conditioning, or suspension of their permit or a permit affecting their interests to the Regional Administrator. In order to be considered by the Regional Administrator, such appeal must be in writing, must state the action(s) appealed, and the reasons therefore, and must be submitted within 30 days of the original action(s) by the Regional Administrator. The appellant may request an informal hearing on the appeal.

(ii) Upon receipt of an appeal authorized by this section, the Regional Administrator will notify the permit applicant, or permit holder as appropriate, and will request such additional information and in such form as will allow action upon the appeal. Upon receipt of sufficient information, the Regional Administrator will rule on the appeal in accordance with the permit eligibility criteria set forth in this section and the FEP, as appropriate, based upon information relative to the application on file at NMFS and the Council and any additional information, the summary record kept of any hearing and the hearing officer's recommended decision, if any, and such other considerations as deemed appropriate. The Regional Administrator will notify all interested persons of the decision, and the reasons therefor, in writing, normally within 30 days of the receipt of sufficient information, unless additional time is needed for a hearing.

(iii) If a hearing is requested, or if the Regional Administrator determines that one is appropriate, the Regional Administrator may grant an informal hearing before a hearing officer designated for that purpose

after first giving notice of the time, place, and subject matter of the hearing in the FEDERAL REGISTER. Such a hearing shall normally be held no later than 30 days following publication of the notice in the FEDERAL REGISTER, unless the hearing officer extends the time for reasons deemed equitable. The appellant, the applicant (if different), and, at the discretion of the hearing officer, other interested parties, may appear personally and/or be represented by counsel at the hearing and submit information and present arguments as determined appropriate by the hearing officer. Within 30 days of the last day of the hearing, the hearing officer shall recommend in writing a decision to the Regional Administrator.

(iv) The Regional Administrator may adopt the hearing officer's recommended decision, in whole or in part, or may reject or modify it. In any event, the Regional Administrator shall notify interested persons of the decision, and the reason(s) therefore, in writing, within 30 days of receipt of the hearing officer's recommended decision. The Regional Administrator's action constitutes final action for the agency for the purposes of the Administrative Procedure Act.

(5) The Regional Administrator may, for good cause, extend any time limit prescribed in this section for a period not to exceed 30 days, either upon his or her own motion or upon written request from the Council, appellant or applicant stating the reason(s) therefore.

[75 FR 2205, Jan. 14, 2010, as amended at 78 FR 33003, June 3, 2013]

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§665.625 Prohibitions.

In addition to the general prohibitions specified in §600.725 of this chapter and §665.15, it is unlawful for any person to do any of the following:

(a) [Reserved]

(b) Fish for, take, or retain any PRIA coral reef ecosystem MUS species:

(1) That is determined overfished with subsequent rulemaking by the Regional Administrator.

(2) By means of gear or methods prohibited under §665.627.

(3) [Reserved]

(4) In violation of any permit issued under §§665.13 or 665.624.

(c) Fish for, take, or retain any wild live rock or live hard coral except under a valid special permit for scientific research, aquaculture seed stock collection or traditional and ceremonial purposes by indigenous people.

[75 FR 2205, Jan. 14, 2010, as amended at 78 FR 33003, June 3, 2013]

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§665.626 Notifications.

Any special permit holder subject to the requirements of this subpart must contact the appropriate NMFS enforcement agent in American Samoa, Guam, or Hawaii at least 24 hours before landing any

PRIA coral reef ecosystem MUS unit species harvested under a special permit, and report the port and the approximate date and time at which the catch will be landed.

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§665.627 Allowable gear and gear restrictions.

(a) Coral reef ecosystem MUS may be taken only with the following allowable gear and methods:

(1) Hand harvest;

(2) Spear;

(3) Slurp gun;

(4) Hand net/dip net;

(5) Hoop net for Kona crab;

(6) Throw net;

(7) Barrier net;

(8) Surround/purse net that is attended at all times;

(9) Hook-and-line (includes handline (powered or not), rod-and-reel, and trolling);

(10) Crab and fish traps with vessel ID number affixed; and

(11) Remote-operating vehicles/submersibles.

(b) PRIA coral reef ecosystem MUS may not be taken by means of poisons, explosives, or intoxicating substances. Possession or use of these materials by any permit holder under this subpart who is established to be fishing for coral reef ecosystem MUS in the management area is prohibited.

(c) PRIA coral reef ecosystem MUS may not be taken by means of spearfishing with SCUBA at night (from 6 p.m. to 6 a.m.) in the U.S. EEZ waters around Howland Island, Baker Island, Jarvis Island, Wake Island, Kingman Reef, Johnston Atoll and Palmyra Atoll.

(d) Existing FEP fisheries shall follow the allowable gear and methods outlined in their respective plans.

(e) Any person who intends to fish with new gear not included in this section must describe the new gear and its method of deployment in the special permit application. A decision on the permissibility of this gear type will be made by the Regional Administrator after consultation with the Council and the director of the affected state fishery management agency.

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§665.628 Gear identification.

(a) The vessel number must be affixed to all fish and crab traps on board the vessel or deployed in the water by any vessel or person holding a permit under §§665.13 or 665.624 or that is otherwise established to be fishing for PRIA coral reef ecosystem MUS in the PRIA fishery management area.

(b) *Enforcement action.* (1) Traps not marked in compliance with paragraph (a) of this section and found deployed in the PRIA fishery management area will be considered unclaimed or abandoned property, and may be disposed of in any manner considered appropriate by NMFS or an authorized officer.

(2) Unattended surround nets or bait seine nets found deployed in the coral reef ecosystem management area will be considered unclaimed or abandoned property, and may be disposed of in any manner considered appropriate by NMFS or an authorized officer.

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§§665.629-665.639 [Reserved]

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§665.640 PRIA crustacean fisheries. [Reserved]

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§665.641 Definitions.

As used in §§665.640 through 665.659:

Crustacean Permit Area 4 (Permit Area 4) means the EEZ around Palmyra Atoll, Kingman Reef, Jarvis Island, Baker Island, Howland Island, Johnston Atoll, and Wake Island.

PRIA crustacean fishing permit means the permit required by §665.642 to use a vessel to fish for PRIA crustacean MUS in the PRIA fishery management area, or to land crustacean MUS shoreward of the outer boundary of the PRIA fishery management area.

PRIA crustacean management unit species means the following crustaceans:

English common name	Scientific name
Spiny lobster	*Panulirus marginatus, Panulirus penicillatus.*
Slipper lobster	Scyllaridae.
Kona crab	*Ranina ranina.*
Deepwater shrimp	*Heterocarpus.* spp.

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§665.642 Permits.

(a) *Applicability.* (1) The owner of any vessel used to fish for lobster in Permit Area 4 must have a permit issued for that vessel.

(2) The owner of any vessel used to fish for deepwater shrimp in Crustacean Permit Area 4 must have a permit issued for that vessel.

(b) *General requirements.* General requirements governing application information, issuance, fees, expiration, replacement, transfer, alteration, display, sanctions, and appeals for permits issued under this section, as applicable, are contained in §665.13.

(c) *Application.* An application for a permit required under this section will be submitted to PIRO as described in §665.13. If the application for a limited access permit is submitted on behalf of a partnership or corporation, the application must be accompanied by a supplementary information sheet obtained from PIRO and contain the names and mailing addresses of all partners or shareholders and their respective percentage of ownership in the partnership or corporation.

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§665.643 Prohibitions.

In addition to the general prohibitions specified in §600.725 of this chapter and §665.15, it is unlawful for any person in Crustacean Permit Area 4 to fish for, take, or retain deepwater shrimp without a permit issued under §665.642.

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§665.644 Notifications.

(a) The operator of any vessel subject to the requirements of this subpart must:

(1) Report, not less than 24 hours, but not more than 36 hours, before landing, the port, the approximate date and the approximate time at which spiny and slipper lobsters will be landed.

(2) Report, not less than 6 hours and not more than 12 hours before offloading, the location and time that offloading of spiny and slipper lobsters will begin.

(b) The Regional Administrator will notify permit holders of any change in the reporting method and schedule required in paragraphs (a)(1) and (2) of this section at least 30 days prior to the opening of the fishing season.

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§665.645 At-sea observer coverage.

All fishing vessels subject to §§665.640 through 665.645 and subpart A of this part must carry an observer when requested to do so by the Regional Administrator.

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§§665.646-665.659 [Reserved]

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§665.660 PRIA precious coral fisheries. [Reserved]

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§665.661 Definitions.

As used in §§665.660 through 665.669:

PRIA precious coral management unit species (PRIA precious coral MUS) means any coral of the genus *Corallium* in addition to the following species of corals:

English common name	Scientific name
Pink coral (also known as red coral)	*Corallium secundum, Corallium regale, Corallium laauense.*
Gold coral	*Gerardia* spp., *Callogorgia gilberti*, *Narella* spp., *Calyptrophora* spp.
Bamboo coral	*Lepidisis olapa, Acanella* spp.
Black coral	*Antipathes dichotoma, Antipathes grandis, Antipathes ulex.*

PRIA precious coral permit area means the area encompassing the precious coral beds within the EEZ around the PRIA. Each bed is designated by a permit area code and assigned to one of the following four categories:

(1) Established beds. [*Reserved*]

(2) Conditional beds. [*Reserved*]

(3) Refugia. [*Reserved*]

(4) Exploratory Area. Permit Area X-P-PI includes all coral beds, other than established beds, conditional beds, or refugia, in the EEZ seaward Palmyra Atoll, Kingman Reef, Jarvis Island, Baker Island, Howland Island, Johnston Atoll and Wake Island.

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§665.662 Permits.

(a) Any vessel of the United States fishing for, taking, or retaining PRIA precious coral MUS in any PRIA precious coral permit area must have a permit issued under §665.13.

(b) Each permit will be valid for fishing only in the permit area specified on the permit. Precious Coral Permit Areas are defined in §665.661.

(c) No more than one permit will be valid for any one vessel at any one time.

(d) No more than one permit will be valid for any one person at any one time.

(e) The holder of a valid permit to fish one permit area may obtain a permit to fish another permit area only upon surrendering to the Regional Administrator any current permit for the precious coral fishery issued under §665.13.

(f) General requirements governing application information, issuance, fees, expiration, replacement, transfer, alteration, display, sanctions, and appeals for permits for the precious coral fishery are contained in §665.13.

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§665.663 Prohibitions.

In addition to the general prohibitions specified in §600.725 of this chapter and in §665.15, it is unlawful for any person to:

(a) Use any vessel to fish for, take, retain, possess or land PRIA precious coral MUS in any precious coral permit area, unless a permit has been issued for that vessel and area as specified in §665.13 and that permit is on board the vessel.

(b) Fish for, take, or retain any species of PRIA precious coral MUS in any precious coral permit area:

(1) By means of gear or methods prohibited by §665.664.

(2) In refugia specified in §665.661.

(3) In a bed for which the quota specified in §665.667 has been attained.

(4) In violation of any permit issued under §§665.13 or 665.17.

(5) In a bed that has been closed pursuant to §§665.666 or 665.669.

(c) Take and retain, possess, or land any live pink coral or live black coral from any precious coral permit area that is less than the minimum height specified in §665.665 unless:

(1) A valid EFP was issued under §665.17 for the vessel and the vessel was operating under the terms of the permit; or

(2) The coral originated outside coral beds listed in this paragraph, and this can be demonstrated through receipts of purchase, invoices, or other documentation.

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§665.664 Gear restrictions.

Only selective gear may be used to harvest coral from any precious coral permit area.

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§665.665 Size restrictions.

The height of a live coral specimen shall be determined by a straight line measurement taken from its base to its most distal extremity. The stem diameter of a living coral specimen shall be determined by measuring the greatest diameter of the stem at a point no less than 1 inch (2.54 cm) from the top surface of the living holdfast.

(a) Live pink coral harvested from any precious coral permit area must have attained a minimum height of 10 inches (25.4 cm).

(b) *Black coral.* Live black coral harvested from any precious coral permit area must have attained either a minimum stem diameter of 1 inch (2.54 cm), or a minimum height of 48 inches (122 cm).

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§665.666 Closures.

(a) If the Regional Administrator determines that the harvest quota for any coral bed will be reached prior to the end of the fishing year, NMFS shall publish a notice to that effect in the FEDERAL REGISTER and shall use other means to notify permit holders. Any such notice must indicate the reason for the closure, the bed being closed, and the effective date of the closure.

(b) A closure is also effective for a permit holder upon the permit holder's actual harvest of the applicable quota.

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§665.667 Quotas.

(a) *General.* The quotas limiting the amount of precious coral that may be taken in any precious coral permit area during the fishing year are listed in §665.667(d). Only live coral is counted toward the quota. The accounting period for all quotas begins July 1, 1983.

(b) *Conditional bed closure.* A conditional bed will be closed to all nonselective coral harvesting after the quota for one species of coral has been taken.

(c) *Reserves and reserve release.* The quotas for exploratory area, X-P-PI, will be held in reserve for harvest by vessels of the United States in the following manner: (1) At the start of the fishing year, the reserve for the PRIA exploratory area will equal the quota minus the estimated domestic annual harvest for that year. (2) As soon as practicable after December 31 each year, the Regional Administrator will determine the amount harvested by vessels of the United States between July 1 and December 31 of the year that just ended on December 31. (3) NMFS will release to TALFF an amount of precious coral for each exploratory area equal to the quota minus two times the amount harvested by vessels of the United States in that July 1-December 31 period. (4) NMFS will publish in the FEDERAL REGISTER a notification of the Regional Administrator's determination and a summary of the information on which it is based as soon as practicable after the determination is made.

(d) PRIA exploratory permit area, X-P-PI, has an annual quota of 1,000 kg for all precious coral MUS combined with the exception of black corals.

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§665.668 Seasons.

The fishing year for precious coral begins on July 1 and ends on June 30 the following year.

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§665.669 Gold coral harvest moratorium.

Fishing for, taking, or retaining any gold coral in any precious coral permit area is prohibited through June 30, 2018.

[78 FR 32182, May 29, 2013]

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Subpart H—Pacific Remote Islands Marine National Monument

SOURCE: 78 FR 33003, June 3, 2013, unless otherwise noted.

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§665.930 Scope and purpose.

The regulations in this subpart codify certain provisions of the Proclamations, and govern the administration of fishing in the Monument.

[80 FR 15695, Mar. 25, 2015]

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§665.931 Boundaries.

The Monument, including the waters and submerged and emergent lands of Wake, Baker, Howland, and Jarvis Islands, Johnston Atoll, Kingman Reef, and Palmyra Atoll, is defined as follows:

(a) *Wake Island.* The Wake Island unit of the Monument includes the waters and submerged and emergent lands around Wake Island to the seaward limit of the U.S. EEZ.

(b) *Howland and Baker Islands.* The Howland and Baker Islands units of the Monument include the waters and submerged and emergent lands around Howland and Baker Islands within an area defined by straight lines connecting the following coordinates in the order listed:

ID	W. long.	Lat.
1	177°27′7″	1°39′15″ N.
2	175°38′32″	1°39′15″ N.
3	175°38′32″	0°38′33″ S.

4	177°27′7″	0°38′33″ S.
1	177°27′7″	1°39′15″ N.

(c) *Jarvis Island.* The Jarvis Island unit of the Monument includes the waters and submerged and emergent lands around Jarvis Island to the seaward limit of the U.S. EEZ.

(d) *Johnston Atoll.* The Johnston Atoll unit of the Monument includes the waters and submerged and emergent lands around Johnston Atoll to the seaward limit of the U.S. EEZ.

(e) *Kingman Reef and Palmyra Atoll.* The Kingman Reef and Palmyra Atoll units of the Monument include the waters and submerged and emergent lands around Kingman Reef and Palmyra Atoll within an area defined by straight lines connecting the following coordinates in the order listed:

ID	W. long.	N. lat.
1	163°11′16″	7°14′38″
2	161°12′3″	7°14′38″
3	161°12′3″	5°20′23″
4	161°25′22″	5°1′34″
5	163°11′16″	5°1′34″
1	163°11′16″	7°14′38″

[78 FR 33003, June 3, 2013, as amended at 80 FR 15695, Mar. 25, 2015]

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§665.932 Definitions.

The following definitions are used in this subpart:

Management unit species or MUS means the Pacific Remote Island Areas management unit species as defined in §§665.601, 665.621, 665.641, and 665.661, and the pelagic management unit species as defined in §665.800.

Monument means the waters and submerged and emergent lands of the Pacific Remote Islands Marine National Monument and the Pacific Remote Islands Marine National Monument Expansion, as defined in §665.931.

Proclamations means Presidential Proclamation 8336 of January 6, 2009, “Establishment of the Pacific Remote Islands Marine National Monument,” and Presidential Proclamation 9173 of September 29, 2014, “Pacific Remote Islands Marine National Monument Expansion.”

[78 FR 33003, June 3, 2013, as amended at 80 FR 15695, Mar. 25, 2015]

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§665.933 Prohibitions.

In addition to the general prohibitions specified in §600.725 of this chapter, and §665.15 and subparts E and F of this part, the following activities are prohibited in the Monument and, thus, unlawful for a person to conduct or cause to be conducted.

(a) Commercial fishing in the Monument.

(b) Non-commercial fishing in the Monument, except as authorized under permit and pursuant to the procedures and criteria established in §665.935.

(c) Transferring a permit in violation of §665.935(d).

(d) Commercial fishing outside the Monument and non-commercial fishing within the Monument on the same trip in violation of §665.934(c).

(e) Non-commercial fishing within 12 nm of emergent land within the Monument, unless authorized by the U.S. Fish & Wildlife Service, in consultation with NMFS and the Council, in violation of §665.934(d). For the purposes of this subsection, consultation means that the U.S. Fish & Wildlife Service will consult with NMFS, which in turn will consult with the Council.

[78 FR 33003, June 3, 2013, as amended at 78 FR 39583, July 2, 2013]

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§665.934 Regulated activities.

(a) Commercial fishing is prohibited in the Monument.

(b) Non-commercial fishing is prohibited in the Monument, except under permit and pursuant to the procedures and criteria established in §665.935 or pursuant to §665.934(d).

(c) Commercial fishing outside the Monument and non-commercial fishing within the Monument during the same trip is prohibited.

(d) Non-commercial fishing is prohibited within 12 nm of emergent land within the Monument, unless authorized by the U.S. Fish & Wildlife Service, in consultation with NMFS and the Council. For the purposes of this subsection, consultation means that the U.S. Fish & Wildlife Service will consult with NMFS, which in turn will consult with the Council.

[78 FR 33003, June 3, 2013, as amended at 78 FR 39583, July 2, 2013]

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§665.935 Fishing permit procedures and criteria.

(a) *Non-commercial fishing*—(1) *Applicability.* Except as provided in section 665.934(d), a vessel that is used to non-commercially fish for, take, retain, or possess MUS in the Monument must be registered for use with a permit issued pursuant to §§665.603, 665.624, 665.642, 665.662, 665.801(f), or 665.801(g).

(2) *Terms and conditions.* Customary exchange of fish harvested in the Monument is prohibited.

(b) *Pacific Remote Islands Monument recreational charter permit*—(1) *Applicability.* Except as provided in §665.934(d), both the owner and operator of a vessel that is chartered to recreationally fish for, take, retain, or possess MUS in the Monument must have a permit issued under this section, and the permit must be registered for use with that vessel. Charter boat customers are not required to obtain a permit.

(2) *Terms and conditions.* (i) The sale or exchange through barter or trade of fish caught by a charter boat fishing in the Monument is prohibited.

(ii) Customary exchange of fish harvested under a Monument recreational charter permit is prohibited.

(c) *Application.* An application for a permit required under this section must be submitted to PIRO as described in §665.13.

(d) *Transfer.* A permit issued under this section is not transferrable.

(e) *Reporting and recordkeeping.* The operator of a vessel subject to the requirements of this section must comply with the terms and conditions described in §665.14.

[78 FR 33003, June 3, 2013, as amended at 78 FR 39583, July 2, 2013]

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§665.936 International law.

The regulations in this subpart shall be applied in accordance with international law. No restrictions shall apply to or be enforced against a person who is not a citizen, national, or resident alien of the United States (including foreign flag vessels) unless in accordance with international law.

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Figure 1 to Part 665—Carapace Length of Lobsters

FIGURE 1 TO PART 665. CARAPACE LENGTH OF LOBSTERS

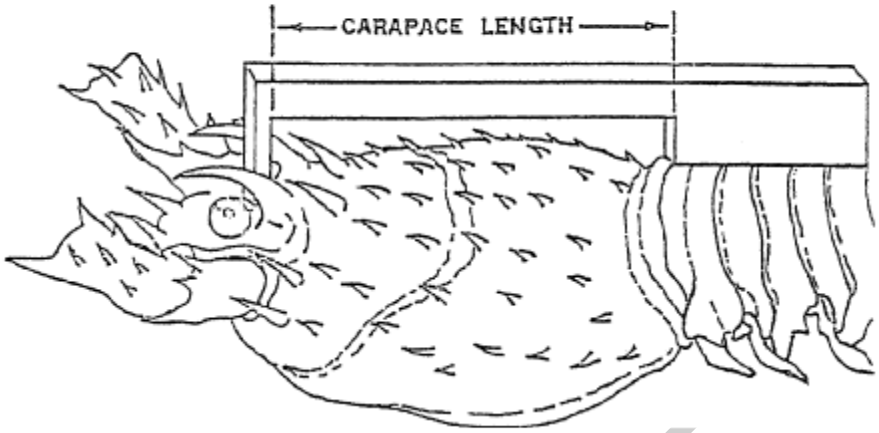

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Figure 2 to Part 665—Length of Fishing Vessels

FIGURE 2 TO PART 665. LENGTH OF FISHING VESSELS

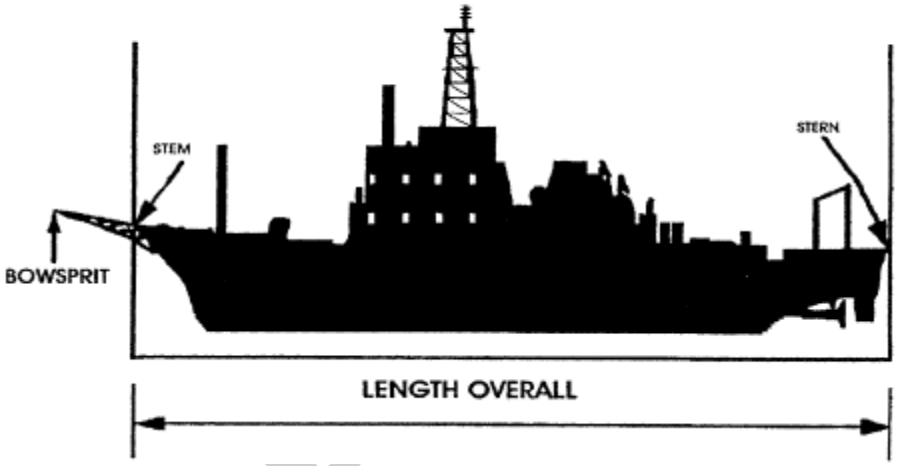

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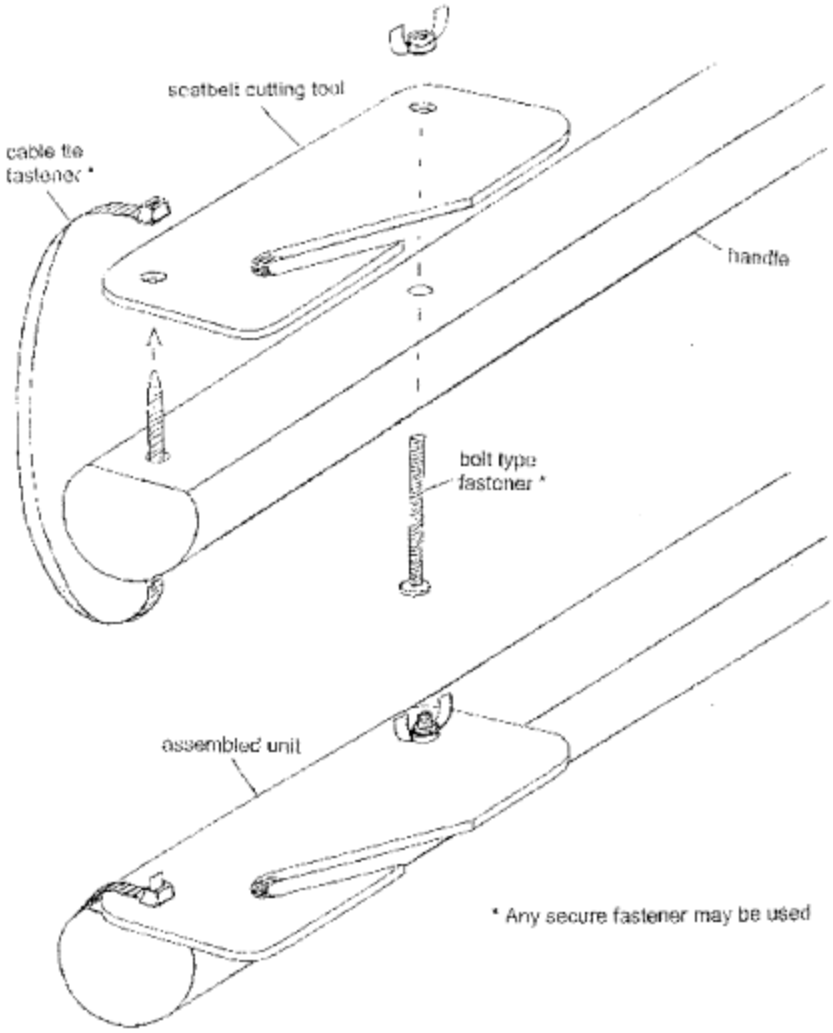
Figure 3 to Part 665—Sample Fabricated Arceneaux Line Clipper

FIGURE 3 TO PART 665. SAMPLE FABRICATED ARCENEAUX LINE CLIPPER



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Appendix D: Summary of Fishery Management Plan and Fishery Ecosystem Plan Amendments

1. Fishery Management Plan Amendments

FMP for Precious Corals of the Western Pacific Region

The fishery management plan (FMP) for Precious Coral Fisheries of the Western Pacific Region was implemented in September 1983 (48 FR 39229, September 29, 1983) and established the plan's management unit species, management areas and classified several known precious coral beds. Since 1983, the FMP has been amended seven times with each amendment summarized in **Table** 1.

Table 1. Amendments to the Precious Coral FMP

No.	Effective Date/Federal Register Notice	Action
7	8/13/08 73 FR 47098	Designated the Auau Channel bed as an established bed with a harvest quota for black coral of 5,000 kg every two years for Federal and state waters combined. Implemented a five year gold harvest moratorium for the entire region.
6	9/12/06 71 FR 53605	Included Federal waters around CNMI and the Pacific Remote Island Areas within the FMP's management area. Extended existing requirements for Federal permits and logbooks to include all harvests of precious corals in EEZ waters in these areas.
5	2/24/04 69 FR 8336	Prepared in parallel with the Coral Reef FMP. Prohibits the harvest of Precious Coral Management Unit Species in the no-take marine protected areas established under the Coral Reef FMP, including areas around Rose Atoll in American Samoa, Kingman Reef, Jarvis Island, Howland Island, and Baker Island.
4	4/19/99 64 FR 19067 8/5/03 56 FR 14866	Addressed new requirements under the 1996 Sustainable Fisheries Act (SFA). Portions of the amendment that were immediately approved included designations of essential fish habitat, definitions of overfishing and descriptions of bycatch and of some fishing communities. Those provisions became effective on February 3, 1999. Remaining provisions regarding Hawaii fishing communities became effective August 5, 2003.
3	10/19/98 63 FR 55809	Established a framework procedure for adjusting management measures in the fishery.
2	1/28/91 56 FR 3072	Defined overfishing for Established beds as: an Established bed shall be deemed overfished with respect to recruitment when the total spawning biomass (all species combined) has been reduced to 20% of its unfished condition. This definition applies to all species of precious corals and is based on cohort analysis of the pink coral, *Corallium secundum*.
1	7/21/88	Applied the management measures of the FMP to the Pacific

No.	Effective Date/Federal Register Notice	Action
	50 FR 27519	Remote Island Areas by incorporating them into a single Exploratory Permit Area, expanded the management unit species to include all species of the genus *Corallium*, and outlined provisions for the issuance of experimental fishing permits designed to stimulate the domestic fishery

In addition to FMP amendments, the management program for precious coral fisheries has been modified through several regulatory amendments and framework actions as described below.

Regulatory Amendment 1: Removed an exemption allowing fishermen who reported black coral harvest to the State of Hawaii within five years prior to April 17, 2002 to harvest black coral at a minimum base diameter of 3/4 inch. All harvest of black corals must be done at a minimum of 1 inch base diameter or 48 inch minimum height (72 FR 59259, September 14, 2007).

Framework Action 1: Revised the definitions of "live coral" and "dead coral," suspended the harvest of gold coral at Makapu'u Bed, applied minimum size restrictions only to live precious corals, prohibited the harvest of black coral with a stem diameter of less than one inch or a height of less than 48 inches (with certain exceptions), prohibited the use of non-selective fishing gear to harvest precious corals, and applied the minimum size restrictions for pink coral to all permit areas (67 FR 11941, February 16, 2002).

FMP for Crustacean Fisheries of the Western Pacific Region

The FMP for Crustacean Fisheries of the Western Pacific Region was approved in 1983. Initial provisions of the FMP, which was initially named "Spiny Lobster Fisheries of the Western Pacific Region," went into effect March 9, 1983 (48 FR 5560, 7 February 1983). The FMP implemented the following management measures for the Northwestern Hawaiian Islands (NWHI) management area: federal permit requirements, a minimum size limit for spiny lobsters, gear restrictions, a ban on the harvest of egg-bearing female spiny lobsters, the closure of waters within 20 nm of Laysan Island, all NWHI waters shallower than 10 fm, and all NWHI lagoons, to fishing for spiny lobsters, a mandatory logbook program, and a requirement to carry a fishery observer if directed by the National Marine Fisheries Service. The FMP also implemented permit, data reporting, and observer requirements within EEZ waters around the Main Hawaiian Islands (MHI), American Samoa, and Guam. Since 1983, the Crustacean FMP has been amended 13 times with each amendment summarized in **Table** 2.

Table 2. Amendments to the Crustaceans FMP

No.	Effective Date/Federal Register Notice	Action
13	11/21/08 73 FR 70603	Included the deepwater shrimp genus *Heterocarpus* as Management Unit Species (MUS) within the Crustaceans FMP. Required Federal permits and reporting for deepwater shrimp fishing in all Federal waters of the Western Pacific Region.

No.	Effective Date/Federal Register Notice	Action
12	10/26/06 71 FR 53605	Included federal waters around CNMI and the Pacific Remote Island Areas in the Crustaceans FMP and implemented federal permit and reporting requirements (71 FR 231) for vessels targeting crustacean MUS in these areas.
11	2/24/04 69 FR 8336	Prepared in parallel with the Coral Reef Ecosystems FMP. This amendment prohibits the harvest of Crustacean MUS in the no-take marine protected areas established under the Coral Reef Ecosystems FMP, including Rose Atoll in American Samoa, Kingman Reef, Jarvis Island, Howland Island, and Baker Island. The final rule implementing the Coral Reef Ecosystem FMP (including Amendment 11 to the Crustaceans FMP) became effective 3/25/04.
10	4/19/99 64 FR 19067 8/5/03 68 FR 46112	Addressed new requirements under the 1996 Sustainable Fisheries Act. Portions of the amendment that were immediately approved included designations of essential fish habitat, and descriptions of bycatch and of some fishing communities. Those provisions became effective on February 3, 1999. Remaining portions approved on August 5, 2003, included provisions regarding Hawaii fishing communities, overfishing definitions, and bycatch.
9	7/5/96 61 FR 35145	Established a system by which the annual harvest guideline would be set based on a constant percent of the population (i.e., proportional to the estimated exploitable population size) based on a specified acceptable risk of overfishing. Amendment 9 set this risk level at 10% and specified that annual harvest guidelines be published by NMFS no later than February 28 of each year. Earlier in-season adjustment procedures were eliminated. Earlier minimum size limits and prohibitions on harvesting of egg bearing females were eliminated and a mechanism was provided for certain regulatory adjustments to be made through framework procedures of the FMP.
8	11/10/94 59 FR 56004	Eliminated the NWHI minimum landings requirements for permit renewal, allowed the catch per unit effort target that is used to set the harvest guideline to be changed through the framework process, and modified reporting requirements
7	3/26/92 57 FR 10437	Established a NWHI limited access program, an adjustable fleet-wide NWHI annual harvest guideline, and a closed season (January through June) in the NWHI fishery. Participation was limited to 15 permits (and vessels). Other measures include a maximum limit on the number of traps per vessel (1,100), revisions to reporting requirements, and other provisions
6	1/28/91 56 FR 3071	Defined recruitment overfishing for lobster stocks in terms of reference points expressed in terms of the spawning potential ratio (SPR). The minimum SPR threshold, below which the stock would be considered recruitment overfished, is 20%.

No.	Effective Date/Federal Register Notice	Action
5	1987	Implemented a minimum size for slipper lobster (5.6 cm tail width), required the release of egg-bearing female slipper lobsters, required escape vents in all lobster traps, and revised some of the permit application and reporting requirements. It also changed the name of the FMP from "Spiny Lobster Fisheries" to "Crustaceans Fisheries."
4	1986	Applied existing NWHI closed areas to slipper lobsters.
3	1985	Revised the minimum spiny lobster size specifications for the NWHI management area to a limit on tail width (5.0 cm).
2	1983	Modified the allowable trap opening dimensions with the intent of minimizing the risk of harm to the Hawaiian monk seal while allowing sufficient flexibility in trap design.
1	1983	Adopted the State of Hawaii's lobster fishing regulations for the federal waters around the MHI.

In addition to FMP amendments, the management program for crustacean fisheries has been modified through several regulatory amendments described below.

Regulatory Amendment 1: Implemented VMS for the crustacean fishery in the NWHI (64 FR 36820, June 8, 1999).

Regulatory Amendment 2: Allocated 1998 NWHI lobster harvest among three individual banks and a fourth combined area (63 FR 40337, June 29, 1998).

Regulatory Amendment 3: Divided the NWHI into four fishing grounds across which harvest is allocated and allowed fishing vessels with NMFS-certified VMS to transit through fishing grounds during a closure (64 FR 36820, June 7, 1999).

FMP for Bottomfish and Seamount Groundfish of the Western Pacific Region

The FMP for Bottomfish and Seamount Groundfish Fisheries of the Western Pacific Region became effective on August 27, 1986 (51 FR 27413). Initial bottomfish fishery management measures prohibited certain destructive fishing techniques, including explosives, poisons, trawl nets, and bottom-set gillnets; established a moratorium on the commercial harvest of seamount groundfish stocks at the Hancock Seamounts, and implemented a permit system for fishing for bottomfish in the waters of the Exclusive Economic Zone (EEZ) around the Northwestern Hawaiian Islands (NWHI). The plan also established a management framework that provided for regulatory adjustments to be made, such as catch limits, size limits, area or seasonal closures, fishing effort limitations, fishing gear restrictions, access limitations, permit and/or catch reporting requirements, as well as a rules-related notice system. Since 1986, the Bottomfish and Seamount Groudfish FMP has been amended multiple times with each amendment summarized in **Tabl**e 3.

Table 3. Amendments to the Bottomfish and Seamount Groundfish FMP.

No.	Effective Date/Federal Register Notice	Action
14	4/04/08 73 FR 18450	Addressed bottomfish overfishing in the Hawaiian Archipelago by implementing a total allowable catch limit (TAC), federal non-commercial permits and reporting requirements, non-commercial bag limits and a closed season for fishing for Deep 7 species in the Main Hawaiian Islands. It also defined the Main Hawaiian Islands bottomfish fishing year as September 1-August 31, and became effective April 1, 2008 (73 FR 18450) with the permit and reporting requirements effective as of August 18, 2008 (73 FR 41296).
11-13		Amendments 11-13 were intended to address various issues which have now become moot due to changing circumstances.
10	12/12/08 73 FR 75615	Prohibited commercial fishing for bottomfish from vessels greater than 40' long in waters 0-10 miles around the Southern Islands of CNMI and 0-10 miles around the Northern Island of Alamagan. Commercial bottomfishing vessels over 40' long must carry active VMS units owned, installed, and maintained by NMFS. Also, the operators of all vessels commercially fishing for bottomfish in EEZ waters around CNMI must obtain federal permits and complete federal logbooks.
9	11/02/06 71 FR 67774	Prohibited vessels greater than 50' long from targeting Bottomfish species within 50 miles of Guam and required these vessels to obtain federal permits and to submit federal logbooks effective December 4, 2006 (71 FR 69496).
8	9/12/06 71 FR 53605	Included federal waters around CNMI and the Pacific Remote Island Areas in the Bottomfish FMP. Implemented federal permitting and reporting requirements for bottomfish fishing in the PRIA effective 1/2/07 (71 FR 69496).
7	2/24/04 69 FR 8336	Developed in parallel with the Coral Reef Ecosystems FMP. Prohibited harvest of Bottomfish and Seamount Groundfish Management Unit Species (MUS) in the no-take marine protected areas established under the Coral Reef Ecosystems FMP. The Coral Reef Ecosystems established such areas around Rose Atoll in American Samoa, Kingman Reef, Jarvis Island, Howland Island, and Baker Island. The final rule implementing the Coral Reef Ecosystem FMP (including Amendment 7 to the Bottomfish FMP) became effective 3/25/04.
6	4/19/99 64 FR19067 8/5/03 68 FR 46112	Addressed new requirements under the 1996 Sustainable Fisheries Act. Portions of the amendment that were immediately approved included designations of essential fish habitat, and descriptions of bycatch and of some fishing communities. Those provisions became effective on 2/3/99. Remaining portions approved on 8/5/03, included provisions regarding Hawaii fishing communities, overfishing definitions, and bycatch.
5	4/28/99	Established a limited entry program for the Mau Zone in the NWHI

No.	Effective Date/Federal Register Notice	Action
	64 FR 22810	with non-transferable permits and landing requirements for permit renewal. Included in requirements was attendance by the primary vessel operator at a protected species workshop. Also reserved 20% of Mau Zone permits a Western Pacific Community Development Program (CDP), as well as instituting a maximum vessel length of 60' for replacement vessels in the Hoomalu or Mau Zones
4	5/30/91 56 FR 24351	Implemented a requirement for vessel owners or operators to notify NMFS at least 72 hours before leaving port if they intend to fish in a "protected species study zone" that extends 50 nautical miles (nm) around the NWHI to allow federal observers to be placed on board bottomfish vessels to record interactions with protected species if this action is deemed necessary
3	1/16/91 56 FR 2503	Defined recruitment overfishing as a condition in which the ratio of the spawning stock biomass per recruit at the current level of fishing to the spawning stock biomass per recruit that would occur in the absence of fishing is equal to or less than 20%. Amendment 3 also delineated a process by which overfishing would be monitored and evaluated.
2	9/6/88 53 FR 29907	Divided the EEZ around the NWHI into the Hoomalu and Mau zones. A vessel limited access system was established for the Ho'omalu Zone, with non-transferable permits and landing requirements for permit renewal and for new entry into the fishery. Access to the Mau Zone was left unrestricted, except for vessels permitted to fish in the Hoomalu Zone.
1	11/11/87 52 FR 38102	Established a system to allow implementation of limited access systems for bottomfish fisheries in EEZ waters around American Samoa and Guam within the framework measures of the FMP.

FMP for Pelagic Fisheries of the Western Pacific Region

The FMP for Pelagic Fisheries of the Western Pacific Region became effective on March 23, 1987 (52 FR 5987). The Pelagic Management Unit Species (PMUS) at that time were billfish, wahoo, mahimahi, and oceanic sharks. The FMP's first measures prohibited drift gillnet fishing within the region's waters of the U.S. EEZ and prohibited foreign longline fishing within certain areas of the EEZ. Since 1987, the Pelagic FMP has been amended multiple times with each amendment summarized in **Table** 4.

Table 4. Amendments to the Pelagic FMP.

No.	Effective Date/Federal Register Notice	Action

No.	Effective Date/Federal Register Notice	Action
18	12/10/09 74 FR 65460	Removed 2,120 set limit for Hawaii-based shallow-set longline fishery. Implemented a new loggerhead sea turtle hard cap of 46 annual interactions.
16-17		Was intended to address issues which have now become moot due to changing circumstances.
15	11/21/08 73 FR 70600	Added the following pelagic squid species to the FMP: *Ommastrephes bartramii*, *Thysanoteuthis rhombus*, and *Sthenoteuthis oualaniensis*. Also, required owners of U.S. vessels greater than 50 ft in length overall that fish for pelagic squid in U.S. EEZ of the western Pacific to obtain Federal permits under the Pelagics Fishery Management Plan, to carry Federal observers if requested by NMFS, and to report any Pacific pelagic squid catch and effort either in Federal logbooks or via existing local reporting systems.
14	6/18/07 72 FR 33442	Partially approved by NMFS. This amendment contained recommendations regarding international and domestic management, including a mechanism by which the Council could participate in international negotiations regarding these stocks. Amendment 14 contained measures to implement control dates for Hawaii's non-longline commercial pelagic vessels (70 FR 47781) and purse seine and longline vessels (70 FR 47782), as well as requirements for federal permits and reporting for Hawaii-based non-longline commercial pelagic vessels. NMFS disapproved the Amendment's international measures as premature. NMFS disapproved the domestic permit and reporting requirements as duplicative of existing State requirements. NMFS noted that Amendment 14 met the requirements of the Magnuson-Act regarding overfishing.
12-13		Was intended to address issues which have now become moot due to changing circumstances.
11	5/24/05 70 FR 29646	Effective August 1, 2005, Amendment 11 established a limited access system for pelagic longlining in EEZ waters around American Samoa. Longline vessel operators were required to obtain federal permits, to complete federal logbooks, to carry and use vessel monitoring systems installed, owned and operated by NFMS on vessels greater than 40 ft in length, to carry federal observers if requested by NMFS, and to follow sea turtle handling and resuscitation requirements.
10	2/24/04 69 FR 8336	Amendment 10 prohibits the harvest of Pelagic Management Unit Species in the no-take marine protected areas established under the Coral Reef Ecosystems FMP. The Coral Reef FMP establishes such areas around Rose Atoll in American Samoa, Kingman Reef, Jarvis Island, Howland Island, and Baker Island. The final rule implementing the Coral Reef Ecosystem FMP includes Amendment

No.	Effective Date/Federal Register Notice	Action
		10 to the Pelagics FMP.
9		Was intended to address issues which have now become moot due to changing circumstances.
8	4/19/99 64 FR 19067 8/5/03 68 FR 46112	Addressed new requirements under the 1996 Sustainable Fisheries Act. Portions of the amendment that were immediately approved (4/19/99) included designations of essential fish habitat and descriptions of some fishing communities. Remaining portions were provisions regarding Hawaii fishing communities, overfishing definitions, and bycatch (approved 8/5/03).
7	5/24/94 59 FR 26979	Replaced Amendment 4 moratorium with a limited entry program for Hawaii-based domestic longline fishery with transferable permits, a limit of 164 vessels, and a maximum vessel size of 101' in length overall. It also established a framework procedure for use with implementation of certain new regulations.
6	11/2/92 57 FR 36637	Specified that all tuna species are designated as fish under U.S. management authority and included tunas and related species as Pelagic Management Unit Species under the FMP. It also applied the longline exclusion zones of 50 nm around the island of Guam and the 25-75 nm zone around the MHI to foreign vessels.
5	3/2/92 57 FR 7661	Created a domestic longline vessel exclusion zone around the Main Hawaiian Islands (MHI) ranging from 50 to 75 nm, and a similar 50 nm exclusion zone around Guam and its offshore banks. A seasonal reduction in the size of the closure was implemented in October 1992; between October and January longline fishing is prohibited within 25 nm of the windward shores of all Main Hawaiian Islands except Oahu, where it is prohibited within 50 nm from the shore.
4	10/14/91 56 FR 52214	Created a 50 nm longline exclusion zone around the NWHI to protect endangered Hawaiian monk seals. It also implemented framework provisions for establishing a mandatory observer program to collect information on interactions between longline fishing and sea turtles.
3	10/14/91 56 FR 52214	Created a 50 nm longline exclusion zone around the NWHI to protect endangered Hawaiian monk seals. It also implemented framework provisions for establishing a mandatory observer program to collect information on interactions between longline fishing and sea turtles.
2	5/26/91 56 FR 24731	Implemented requirements for domestic pelagic longline fishing and transhipment vessel operators to have Federal permits, maintain Federal fishing logbooks, and, if fishing within 50 nm of the Northwestern Hawaiian Islands, to have observers on board if directed by NMFS. It required longline gear to be marked with the official number of the permitted vessel, and incorporated waters of the EEZ around CNMI into the area managed under the FMP.

No.	Effective Date/Federal Register Notice	Action
1	3/1/91 56 FR 9686	Defined recruitment overfishing for each PMUS. Defined the optimum yield for PMUS.

In addition to FMP amendments, the management program for pelagic fisheries has been modified through several regulatory amendments and framework actions described below.

Regulatory Amendment 1: Incorporated reasonable and prudent alternative of the March 2001 Biological Opinion issued by NMFS. This amendment prohibited shallow set pelagic longlining north of the equator and closed waters between 0° and 15° N from April-May annually to longline fishing. It instituted sea turtle handling requirements for all vessels using hooks to target pelagic species in the region's EEZ waters and extended the protected species workshop requirement to include the operators of vessels registered to longline general permits (67 FR 40232, May 8, 2002**)**.

Regulatory Amendment 2: Established Federal permit and reporting requirements for any vessel using troll or handline gear to catch PMUS in EEZ waters around the Pacific Remote Island Areas of Kingman Reef, Howland, Baker, Jarvis, Johnston and Wake Islands, and Palmyra and Midway Atolls (67 FR 59813, September 3, 2002)

Regulatory Amendment 3: Implemented measures for the longline fisheries to achieve optimum yield while not jeopardizing the long term existence of sea turtles and other listed species. The amendment established a limited Hawaii-based shallow-set swordfish fishery using circle hooks with mackerel bait. Fishing effort in the shallow-set swordfish fishery was limited to 50% of the 1994-1999 annual average number of sets (just over 2,100 sets) allocated between fishermen applying to participate in the fishery. A 'hard' limit on the number of leatherback (16) and loggerhead (17) turtle interactions that could occur in the swordfish fishery was implemented; the fishery closed for the remainder of the calendar year if either limit was reached. The amendment re-implemented earlier sea turtle handling and resuscitation requirements and included conservation projects to protect sea turtles in their nesting and coastal habitats. This rule implemented the requirement for night setting imposed by the USFWS Biological Opinion on Hawaii-based longline vessels targeting swordfish north of 23 degrees north latitude (69 FR 17329, April 2, 2004**)**.

Regulatory Amendment 4: Included measures to minimize turtle interactions by non-Hawaii based domestic longline vessels operating in the Western Pacific under general longline permits. Vessels with longline general permits making shallow sets north of the equator were required to use 18/0 circle hooks with mackerel-type bait and dehookers to release any accidentally caught turtles. The amendment required vessel operators and owners with general longline permits to annually attend protected species training workshops. Operators of vessels with general longline permits were required to carry and use specific mitigation gear to aid release of sea turtles accidentally hooked or entangled by longlines. This amendment required operators of non-longline pelagic vessels (e.g. trollers and handliners) to follow handling guidelines and remove trailing gear wherever they fish (70 FR 69282, November 14, 2005).

Regulatory Amendment 5: Allowed operators of Hawaii-based longline vessels fishing north of 23 degrees north latitude, as well as those targeting swordfish south of 23 degrees north, to utilize side-setting to reduce seabird interactions in lieu of the seabird mitigation measures required by Framework Measure 1 (70 FR 75075, December 17, 2005).

Regulatory Amendment 6: Removed the seven day delay in effectiveness when closing the Hawaii based shallow-set longline fishery as a result of reaching interaction limits for sea turtles, allowing instead for an immediate closure of the fishery (72 FR 8289, February 26, 2007).

Regulatory Amendment 7: Provided pelagic fishery participants the option of using NMFS approved electronic logbooks in lieu of paper logbooks (72 FR 19123, April 16, 2007)

Framework Amendment 1: Prohibited fishing for pelagic species by vessels greater than 50 ft in length overall within EEZ waters 0-50 nm around the islands of American Samoa. Exception: vessels that landed PMUS in American Samoa under a Federal longline general permit prior to November 13, 1997 (67 FR 4369, January 30, 2002)

Framework Amendment 2: Incorporated terms and conditions developed by the Council and contained in the November 28, 2000 USFWS seabird Biological Opinion requiring Hawaii-based pelagic longline vessel operators to use blue-dyed bait, strategic offal discards, and line shooters with weighted branch lines when fishing north of 23° N. Also included requirement that all Hawaii-based longline vessel owners and operators annually attend a protected species workshop conducted by NMFS (67 FR 34408, May 12, 2002)

FMP for Coral Reef Ecosystem Fisheries of the Western Pacific Region

The FMP for Coral Reef Ecosystems of the Western Pacific Region was partially approved on June 14, 2002. NMFS disapproved a portion of the plan that governs fishing in the Northwestern Hawaiian Islands (NWHI) west of 160°50' W. long. because it would be inconsistent with or duplicate certain provisions of Executive Orders 13178 and 13196, which together established the NWHI Coral Reef Ecosystem Reserve. A final rule implementing the Coral Reef Ecosystem FMP was published on February 24, 2004 (69 FR 8336). The FMP is the nation's first ecosystem-based plan for fisheries and includes specific measures to promote sustainable fisheries while providing for substantial protection of coral reef ecosystem resources and habitats throughout the Council's jurisdiction. The management measures of the Coral Reef Ecosystems FMP:

- Established a network of marine protected areas (MPA) in the Pacific Remote Island Areas (PRIA). Howland, Baker, Jarvis Islands, Rose Atoll, and Kingman Reef have been designated as no-take MPAs. Palmyra and Johnston Atolls, and Wake Islands are designated as low-use MPAs where fishing is allowed under special fishing permits. Both no-take and low-use MPAs were proposed for the NWHI in the FMP, but were disapproved by NMFS;
- Requires a special permit and federal reporting system for controlling and monitoring the harvest of certain coral reef ecosystem management unit species (MUS) for which there is little or no information. Special permits are also required to fish in all areas designated as low-use MPAs. The FMP also uses data collected under existing local reporting systems to monitor the harvest of currently fished coral reef ecosystem MUS;
- Prohibits the use of destructive and non-selective fishing gears;

- Prohibits harvesting of coral and live rock, but allow limited take under the special permit system for collection of seed stock by aquaculture operations, and religious/cultural use by indigenous peoples;
- Incorporates an adaptive management approach using a framework process for rapid regulatory modifications in the event of major changes within coral reef ecosystems or coral reef fisheries;
- Considers and take into account in management, the historical and cultural dependence of coral reef resources by indigenous people and;
- Identifies and prioritize coral reef related research needs for each island area, including socio-economic and cultural research for future potential allocation of resources.

Since its implementation in 2004, the Coral Reef FMP has not been amended.

2. Fishery Ecosystem Plan Amendments

Omnibus Amendment: Community Development Program Process, 9/3/10

The Council amended all FEPs to establish eligibility requirements and procedures for reviewing and approving community development plans. The intent is to promote participation of island communities in fisheries that they traditionally depend on, but may not have the capabilities to support continued and substantial participation. A second final rule was published 11/05/10 in which OMB approved the collection-of-information requirements (75 FR 68199).

Omnibus Amendment: Establish a Western Pacific Region Process for Specifying Annual Catch Limits and Accountability Measures, 6/27/11

The Council amended all FEPs to establish the mechanism the Council will use to specify ACLs and AMs for each FEP fishery. Specifically, the proposed action described in this document consists of three components that would: 1) in each FEP, establish a mechanism the Council will use to determine ACLs and AMs , including a process for setting acceptable biological catch limits (ABCs); 2) adopt the ecosystem component (EC) species classification described in the NMFS advisory guidelines for National Standard 1 (NS1) so the Council can develop specific criteria for identifying EC species in subsequent amendments to the FEPs; and 3) identify pelagic management unit species that have statutory exceptions to the ACL and AM requirements.

Amendment to the Pacific Pelagic, American Samoa, Mariana, and Pacific Remote Island Area FEPs: Fishery Management in the Marianas Trench, Pacific Remote Islands, and Rose Atoll Marine National Monuments,

The Council amended the Pacific Pelagics, American Samoa, Pacific Remote Island Areas, and the Mariana Islands FEPs, to establish certain provisions relating to non-commercial fishing practices. Consistent with the monument Proclamations, the amendments:

- Codified the boundaries of the Monuments and their various management units.
- Implemented the prohibition on commercial fishing at Rose Atoll and PRI Monuments, and in the Islands Unit of the Marianas Trench Monument.

- Established management measures for non-commercial and recreational fishing in the Monuments including, but not limited to:
    - Requiring Federal permits and reporting for non-commercial and recreational charter fishing to aid in the monitoring of fishing activities.
    - Limiting fishing permit eligibility to residents and businesses of local fishing communities in the Rose Atoll Monument and Marianas Trench Monument, Islands Unit.
    - Allowing customary exchange in non-commercial fishing in the Marianas Trench Islands Unit and Rose Atoll Monuments to help preserve traditional indigenous and cultural fishing practices.
    - Defining customary exchange as the non-market exchange of marine resources between fishermen and community residents for goods, services, and/or social support for cultural, social or religious reasons, and may include cost recovery through monetary reimbursements and other means for actual trip expenses (ice, bait, food, or fuel) that may be necessary to participate in fisheries in the western Pacific. Customary exchange of fish harvested in the Monuments includes family and friends of residents of the fishing communities.
    - Prohibiting all fishing within 12 nautical miles (nm) of the Pacific Remote Islands, subject to USFWS's authority to allow non-commercial fishing, in consultation with NMFS and the Council.
    - Prohibit all fishing within 12 nm around Rose Atoll.
- Prohibited the conduct of commercial fishing outside of a monument, and noncommercial fishing within a monument, on the same trip.

Amendment 2 to the Pacific Pelagic FEP: Establishment of Longline Prohibited Areas in the Mariana Archipelago, 3/4/2011

The Council amended the Pacific Pelagic FEP to establish a 30 mile longline fishing prohibited areas in the CNMI to promote sustained participation in fishing by Guam and CNMI fishing communities.

Amendment 5 to the Pacific Pelagic FEP: Measures to Reduce Interactions between the American Samoa Longline Fishery and Green Sea Turtles, 8/24/11

The American Samoa longline fishery has been observed to interact with (hook or entangle) with green sea turtles (Chelonia mydas) which are listed as threatened under the Endangered Species Act. To address this issue, the Council amended the Pelagics FEP to provide for the longterm survival, recovery, and sustainability of the sea turtles by reducing the number of sea turtle interactions with the fishery.

Amendment 7 to the Pacific Pelagic FEP: Use and Assignment of Catch and Effort Limits of Pelagic Management Unit Species by the U.S. Pacific Island Territories. 3/28/14

Amendment 7 establishes a management framework and process for specifying fishing catch and effort limits and accountability measures for pelagic fisheries in the U.S. Pacific territories (American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands). The framework authorizes the government of each territory to allocate a portion of its specified catch or effort limit to a U.S. fishing vessel or vessels through a specified fishing agreement, and

establish criteria, which a specified fishing agreement must satisfy. The framework also includes measures to ensure accountability for adhering to fishing catch and effort limits.

Table 5. Amendments to the Fishery Ecosystem Plans (post-2009).

FEP	No.	Effective Date/Federal Register Notice	Action
AS	1	6/27/11 76 FR 37285	Omnibus amendment. Establishes eligibility requirements and procedures for reviewing and approving community development plans. The intent is to promote participation of island communities in fisheries that they traditionally depend on, but may not have the capabilities to support continued and substantial participation. . A second final rule was published 11/05/10 in which OMB approved the collection-of-information requirements (75 FR 68199).
AS	2	09/03/10 75 FR 54044	Omnibus amendment that establishes a mechanism for specifying annual catch limits.
HI	1	09/03/10 75 FR 54044	Omnibus amendment. Establishes eligibility requirements and procedures for reviewing and approving community development plans. The intent is to promote participation of island communities in fisheries that they traditionally depend on, but may not have the capabilities to support continued and substantial participation. A second final rule was published 11/05/10 in which OMB approved the collection-of-information requirements (75 FR 68199).
HI	2	11/10/10 75 FR 69015	Establishes the Hancock Seamounts Ecosystem Management Area as well as continues the moratorium on armorhead and other seamount groundfish until the armorhead stock is rebuilt.
HI	3	6/27/11 76 FR 37285	Omnibus amendment that establishes a mechanism for specifying annual catch limits
MA	1	09/03/10 75 FR 54044	Omnibus amendment. Establishes eligibility requirements and procedures for reviewing and approving community development plans. The intent is to promote participation of island communities in fisheries that they traditionally depend on, but may not have the capabilities to support continued and substantial participation. A second final rule was published 11/05/10 in which OMB approved the collection-of-information requirements (75 FR 68199).
MA	2	6/27/11 76 FR 37285	Omnibus amendment that establishes a mechanism for specifying Annual Catch Limits.
PRIA	1	6/27/11	Omnibus amendment that establishes a mechanism for

FEP	No.	Effective Date/Federal Register Notice	Action
		76 FR 37285	specifying annual catch limits.
PRIA	2	6/03/13 78 FR 32996	Establishes management measures for non-commercial and recreational fishing within the Pacific Remote Islands Marine National Monument; prohibits commercial fishing within monument
PEL	1	09/03/10 75 FR 54044	Eligibility requirements and procedures for reviewing and approving community development plans. The intent is to promote participation of island communities in fisheries that they traditionally depend on, but may not have the capabilities to support continued and substantial participation.
PEL	2	Disapproval: 7/11/11 76 FR 40764	Establishes a purse seine area closure in American Samoa. The purse seine area closure was disapproved.
PEL	3	6/27/11 76 FR 37287	Establishes a purse seine area closure and longline area closure in CNMI. The final rule only approved the longline closure.
PEL	4	6/27/11 76 FR 37285	Omnibus amendment that establishes a mechanism for specifying annual catch limits.
PEL	5	8/24/11 76 FR 52888	American Samoa longline gear configuration modifications to reduce sea turtle interactions.
PEL	6		
PEL	7		Catch and effort limits for the US Participating Territories; Specification of annual bigeye tuna catch limits for the US Participating Territories.

Appendix E: MSY Control Rule & Stock Status Determination Criteria and Process for Specifying Annual Catch Limits and Accountability Measures

MSY Control Rule and Stock Status Determination Criteria

A MSY control rule is a control rule that specifies the relationship of F to B or other indicator of productive capacity under an MSY harvest policy. Because fisheries must be managed to achieve optimum yield, not MSY, the MSY control rule is a benchmark control rule rather than an operational one. However, the MSY control rule is useful for specifying the "objective and measurable criteria for identifying when the fishery to which the plan applies is overfished" that are required under the MSA. The National Standard Guidelines (74 FR 3178) refer to these criteria as "status determination criteria" and state that they must include two limit reference points, or thresholds: one for F that identifies when overfishing is occurring and a second for B or its proxy that indicates when the stock is overfished.

The status determination criterion for F is the maximum fishing mortality threshold (MFMT). Minimum stock size threshold (MSST) is the criterion for B. If fishing mortality exceeds the MFMT for a period of one year or more, overfishing is occurring. A stock or stock complex is considered overfished when its biomass has declined below a level that jeopardizes the capacity of the stock to produce MSY on a continuing basis (i.e., the biomass falls below MSST). A Council must take remedial action in the form of a new FMP, an FMP amendment, or proposed regulations within two years following notification by the Secretary of Commerce that overfishing is occurring, a stock or stock complex is overfished or approaching an overfished condition[1] or existing remedial action to end previously identified overfishing or to rebuild an overfished stock has not resulted in adequate progress.

The National Standard Guidelines state that the MFMT may be expressed as a single number or as a function of some measure of the stock's productive capacity. Guidance in Restrepo et al. (1998:17) regarding specification of the MFMT is based on the premise that the MSY control rule constitutes the MFMT. In the example in Figure 1 the MSY control rule sets the MFMT constant at F_{MSY} for values of B greater than the MSST and decreases the MFMT linearly with biomass for values of B less than the MSST. This is the default MSY control rule recommended in Restrepo et al. (1998). Again, if F is greater than the MFMT for a period of one year or more, overfishing is occurring.

The National Standard Guidelines state that to the extent possible, the MSST should equal whichever of the following is greater: One-half the MSY stock size, or the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock or stock complex were exploited at the MFMT. The MSST is indicated in Figure 1 by a vertical line at a biomass level somewhat less than B_{MSY}. A specification of MSST below B_{MSY} would allow

[1] A stock or stock complex is approaching an overfished condition when it is projected that there is more than a 50 percent chance that the biomass of the stock or stock complex will decline below MSST within two years (74 FR 3178).

for some natural fluctuation of biomass above and below B_{MSY}, which would be expected under, for example, an MSY harvest policy. Again, if B falls below MSST the stock is overfished.

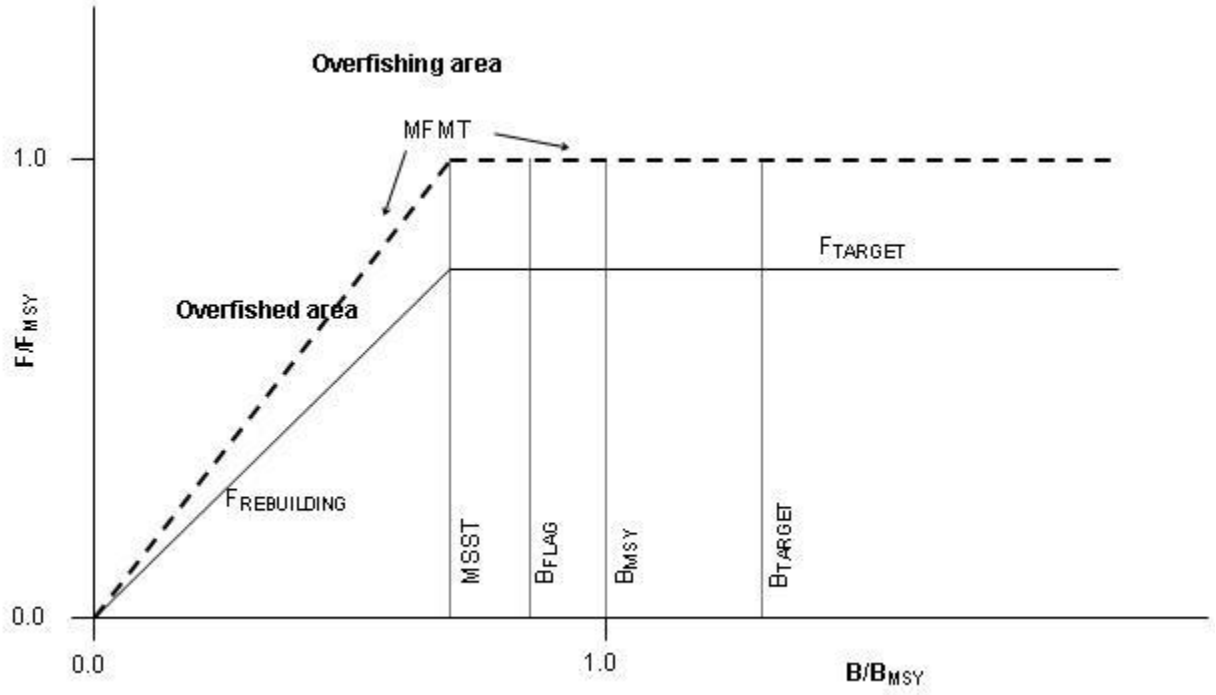

Figure 1. Example of MSY, Target and Rebuilding Control Rules
Source: Restrepo et al. 1998

Warning reference points comprise a category of reference points that will be considered in this FEP together with the required thresholds. Although not required under the MSA, warning reference points could be specified in order to provide warning in advance of B or F approaching or reaching their respective thresholds. Considered in this FEP is a stock biomass flag (B_{FLAG}) that would be specified at some point above MSST, as indicated in Figure 1. The control rule would not call for any change in F as a result of breaching B_{FLAG} – it would merely serve as a trigger for consideration of action or perhaps preparatory steps towards such action. Intermediate reference points set above the thresholds could also be specified in order to trigger changes in F – in other words, the MFMT could have additional inflection points.

Target Control Rule and Reference Points
A target control rule specifies the relationship of F to B for a harvest policy aimed at achieving a given target. Optimum yield (OY) is one such target, and National Standard 1 requires that conservation and management measures both prevent overfishing and achieve OY on a continuing basis. Optimum yield is the yield that will provide the greatest overall benefits to the nation, and is prescribed on the basis of MSY, as reduced by any relevant economic, social, or ecological factor. MSY is therefore an upper limit for OY.

A target control rule can be specified using reference points similar to those used in the MSY control rule, such as F_{TARGET} and B_{TARGET}. For example, the recommended default in Restrepo et al. (1998) for the target fishing mortality rate for certain situations (ignoring all economic, social, and ecological factors except the need to be cautious with respect to the thresholds) is 75 percent of the MFMT, as indicated in Figure 1. Simulation results using a deterministic model have shown that fishing at 0.75 F_{MSY} would tend to result in equilibrium biomass levels between 1.25 and 1.31 B_{MSY} and equilibrium yields of 0.94 MSY or higher (Mace 1994).

It is emphasized that while MSST and MFMT are limits, the target reference points are merely targets. They are guidelines for management action, not constraints. For example Restrepo et al. (1998) state that target reference points should not be exceeded more than 50% of the time, nor on average.

Rebuilding Control Rule and Reference Points

If it has been determined that overfishing is occurring, a stock or stock complex is overfished or approaching an overfished condition, or existing remedial action to end previously identified overfishing or to rebuild an overfished stock has not resulted in adequate progress, the Council must take remedial action within two years. In the case that a stock or stock complex is overfished (i.e., biomass falls below MSST in a given year), the action must be taken through a stock rebuilding plan (which is essentially a rebuilding control rule as supported by various analyses) with the purpose of rebuilding the stock or stock complex to the MSY level (B_{MSY}) within an appropriate time frame, as required by MSA §304(e)(4). The details of such a plan, including specification of the time period for rebuilding, would take into account the best available information regarding a number of biological, social, and economic factors, as required by the MSA and National Standard Guidelines.

If B falls below MSST, management of the fishery would shift from using the target control rule to the rebuilding control rule. Under the rebuilding control rule in the example in Figure 1, F would be controlled as a linear function of B until B recovers to MSST (see $F_{REBUILDING}$), then held constant at F_{TARGET} until B recovers to B_{MSY}. At that point, rebuilding would have been achieved and management would shift back to using the target control rule (F set at F_{TARGET}). The target and rebuilding control rules "overlap" for values of B between MSST and the rebuilding target (B_{MSY}). In that range of B, the rebuilding control rule is used only in the case that B is recovering from having fallen below MSST. In the example in Figure 1 the two rules are identical in that range of B (but they do not need to be), so the two rules can be considered a single, integrated, target control rule for all values of B.

Measures to Prevent Overfishing and Overfished Stocks

The control rules specify how fishing mortality will be controlled in response to observed changes in stock biomass or its proxies. Implicitly associated with those control rules are management actions that would be taken in order to manipulate fishing mortality according to the rules. In the case of a fishery which has been determined to be "approaching an overfished condition or is overfished," MSA §303(a)(10) requires that the FMP "contain conservation and management measures to prevent overfishing or end overfishing and rebuild the fishery."

Use of National Standard 1 Guidelines in FEPs
This FEP carries forward the provisions pertaining to compliance with the Sustainable Fisheries Act which were recommended by the Council and subsequently approved by NMFS (68 FR 16754, April 7, 2003). Because biological and fishery data are limited for all species managed by this FEP, MSY-based control rules and overfishing thresholds are specified for multi-species stock complexes.

Process for Specifying Annual Catch Limits (ACLs) and Accountability Measures (AMs)

In 2012, a mechanism for specifying ACLs was established in the FEPs for American Samoa, Hawaii, the Mariana Archipelago, the Pacific Remote Island Areas, and western Pacific Pelagic fisheries. The ACL mechanism included a tiered system of ABC control rules that the SSC applies to calculate ABC. Included in this is a qualitative method the Council employed to determine an appropriate P* (P* denotes risk of overfishing) value for each fishery. The ACL mechanism also includes methods for determining ACLs and AMs for stocks and stock complexes in the fishery. ACLs and AMs developed by the Council are specified by the agency prior to the start of each fishing year. Figure 2 illustrates the method for specifying ACLs, including the procedures for calculating ABC and setting ACL and AMs that are all described in this section.

Calculation of the Acceptable Biological Catch

This section describes how the ABC is calculated and set compared to the OFL using ABC control rules that account for the level of scientific knowledge about the stock or stock complex, scientific uncertainty in the estimate of OFL, and other scientific information. This section also discusses how the acceptable risk of overfishing (P*) is factored into the ABC control rule and how P* is determined.

Tiered System of ABC Control Rules
For stocks and stock complexes required to have an ABC, the Council utilizes a five-tiered system of ABC control rules that allows for different levels of scientific information to be considered when calculating ABC. The control rules are organized from data rich down to data poor, with Tier 1 being the highest (data rich) and Tier 5 being the lowest (data poor). Tiers 1-2 involve data rich to data moderate situations and include levels of uncertainty derived from model-based stock assessments. Tiers 3-5 involve data poor situations and include levels of uncertainty derived from ad-hoc procedures including simulation models or expert opinion.

When calculating an ABC for a stock or stock complex, the SSC first evaluate the information available for the stock and assign the stock or stock complex into one of the five tiers. The SSC then applies the control rule assigned to that tier to determine the ABC. The SSC may recommend an ABC that differs from the result of the control rule calculation based on factors such as data uncertainty, recruitment variability, declining trends in population variables, and other factors determined relevant by the SSC, but must explain their rationale. The tiered system of ABC control rules are described below.

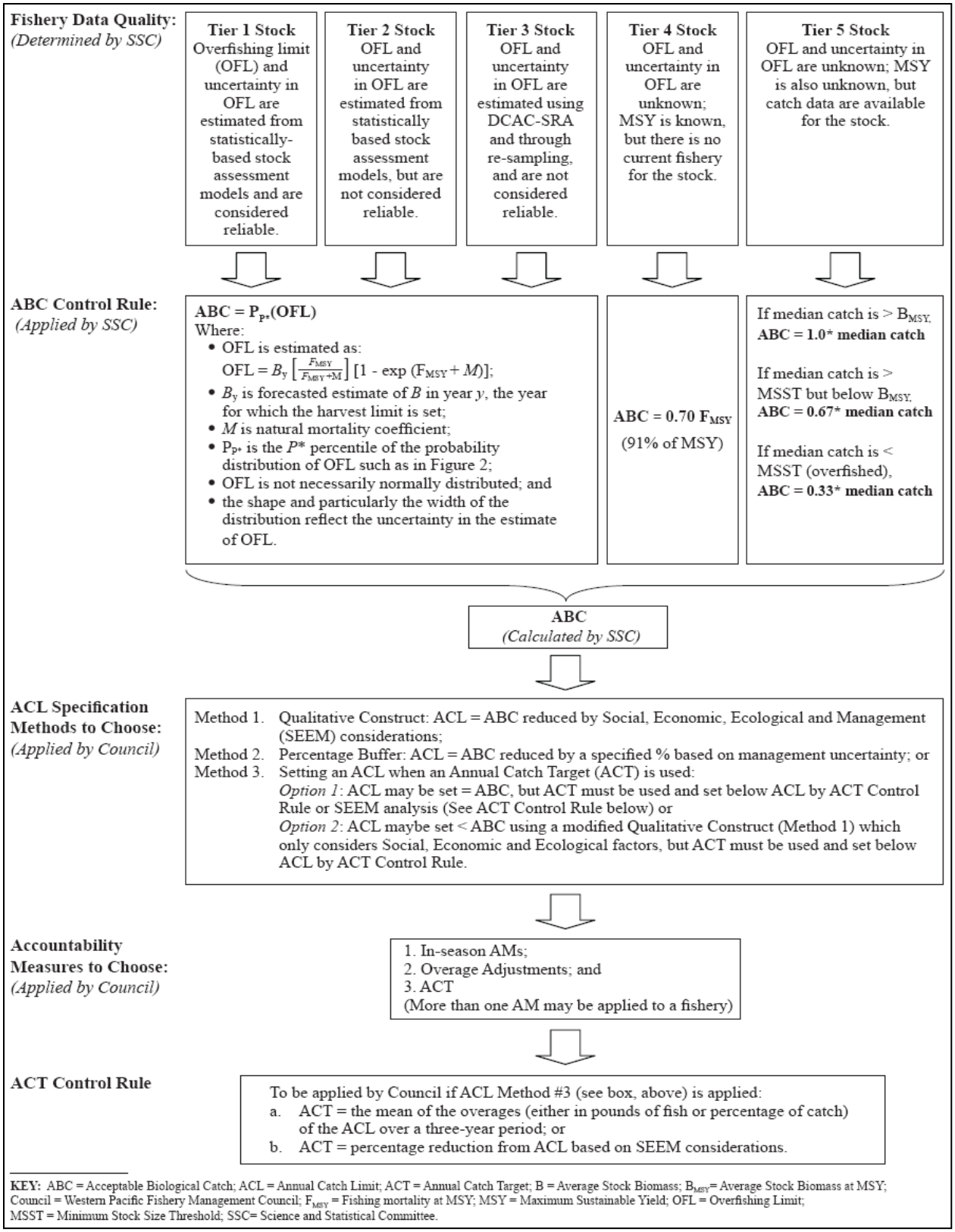

Figure 2. Schematic of method for specifying ABC, ACL and AMs, including ACTs.

Tier 1. Model-Based Probabilistic Approach to Estimating ABCs
In this tier, the data used are reliable and complete enough to be able to utilize statistical-based stock assessment models (e.g., Stock Synthesis 2 (or 3), Multifan-CL (MFCL), C++ Algorithmic Stock Assessment Laboratory (CASAL), and Bayesian production models). From these stock assessments, reliable estimates of MSY, F_{MSY}, B_{MSY}, and B_t are available. Of special relevance to being included in this tier, measures of the uncertainty of F_{MSY}, B_t and B_{t+k} and OFL_{t+k} must be available directly.

In plain English:

ABC is the maximum value for which the probability "p" of exceeding OFL is less than P*.

Or, in conceptual mathematical terms:

ABC = max (x | p(x > OFL) < P*)

Or, as commonly estimated:

ABC = P_{P*}(OFL)
Where:

- OFL is estimated as $\text{OFL} = B_y \left[\frac{F_{\text{MSY}}}{F_{\text{MSY}}+M}\right][1 - \exp(F_{\text{MSY}} + M)]$;
- B_y is forecasted estimate of B in year y, the year for which the harvest limit is set;
- M is natural mortality coefficient;
- P_{P*} is the P* percentile of the probability distribution of OFL such as in Figure 2;
- OFL is not necessarily normally distributed; and
- the shape and particularly the width of the distribution reflect the uncertainty in the estimate of OFL.

The Council must advise the SSC on the acceptable P* to use prior to calculating and recommending the ABC. If the SSC determines that the uncertainty of OFL is underestimated (due to underestimating the uncertainty of F_{MSY} and/or the forecasted estimated B_t), the SSC could appropriately rescale the width of the OFL distribution.

Tier 2. Quasi-Probabilistic Approach to Estimating ABCs
The key difference between assessments in Tier 1 and Tier 2 is that in Tier 2, measures of uncertainty of OFL are not as reliable or are not available from a single, integrated stock assessment model. Reliable data must still be available to be in included in this tier, but those used are obtained through some separate analysis or analyses. The methods often involve re-sampling or ad hoc methods. While the statistical-based model characteristic of Tier 1 can occur here, the common assessments are Yield-per-Recruit (Y/R) and Spawning-per-Recruit (SPR). Such assessments involve the use of F_{MSY} proxies, usually $F_{30\%}$ and $F_{60\%}$. The data in Tier 2 may not be as reliable or complete as in Tier 1, though still of sufficient quality to provide fully usable stock assessments.

$F_{30\%}$ = Fishing at the rate that reduces spawning biomass per recruit to 30% of the unfished value. Used as a substitute for F_{MSY} when using Y/R and SPR stock assessments. $F_{60\%}$, as well as others, has also commonly been used.

ABC is estimated using the equation in Tier 1 above, with the uncertainty estimates coming from re-sampling (i.e. method for estimating and re-estimating probability distributions such as bootstrapping). The Council must advise the SSC on the acceptable P* to use prior to calculating and recommending the ABC.

Tier 3. Data-poor Probabilistic Approach to Setting ABCs

In this tier, the available data are not sufficient for the use of model-based assessment tools. Data are sufficient to apply the data limited approaches such as (but not limited to) Depletion-Corrected Average Catch (DCAC) (MacCall 2009), Stock Reduction Analysis (DCAC-SRA) (Dick and MacCall 2011), Catch-MSY (Martell and Froese 2012), Biomass-augmented catch-MSY (Sabater and Kleiber 2014) with information on the biology of the stock, or DCAC, in which there is some estimate of natural mortality (M), but other life history information is lacking. For a comprehensive list of data limited approaches see Carruthers et al 2014. In these circumstances, the uncertainty of OFL (the probability distribution of OFL) can be estimated using the Monte Carlo simulation (i.e. a technique that uses algorithms that rely on repeated random sampling to compute results). These tools are to be applied to long-lived species where the natural mortality coefficient M should be less than 0.20 and recruitment should not be highly episodic.

ABC is estimated using the equation in Tier 1 above, with the uncertainty estimates established by the Monte Carlo simulation. Again, the Council must advise the SSC on the acceptable P* to use prior to calculating and recommending the ABC.

Tier 4. ABC Control Rule for Species without Current Harvest

This ABC control rule is for species or species assemblages with stock assessments and/or MSY estimates, but no current harvest, such as deepwater shrimp (*Heterocarpus*). The ABC is set at 0.70 F_{MSY} (= yield 91% OFL = 91% MSY = ABC; see Walters et al. 2005) as a precautionary measure to maximize yield while minimizing biomass impacts and accounting for scientific uncertainty. An alternative target fishing mortality value may be specified if additional data or modeling is available to support it, or the Council chooses to be more precautionary.

Walters et al. (2005) provided an example through the modeling tool, ECOSIM, in which k = 0.7 represents a precautionary factor in setting the target fishing mortality (F_{MSY}), which is predicted to have little impact on yield. When k = 0.7, the ECOSIM simulations implied a sustainable yield of around 0.9 MSY. "k" is a factor that a fishery modeler can vary to represent varying levels of precaution for F_{MSY} within the ECOSIM model. Similarly, NMFS Technical Guidance on implementing NS1 by Restrepo et al. (1998) recommended a default fishing mortality target of 25% below MFMT, or 0.75 F_{MSY}, which results in an equilibrium yield of 94% MSY or higher. This Tier 4 control rule adopted by the WPFMC is more precautionary than the control rule recommended by Restrepo et al. (1998) and in line with the results of Walters et al. (2005). As Tier 4 involves a fishery with no current harvest, this ABC control rule does not include

consideration of P*; however if harvest occurs, the fishery may be moved into higher tier where P* would be need to be considered.

Tier 5. Data-poor Ad-hoc Approach to Setting ABCs
In this tier, catches may be small and/or the catch history may contain gaps or be too variable. Catch history may also be lacking in consistently stable periods or periods with consistent trends for using DCAC-SRA or DCAC. Hence, there is no basis for estimating a reliable MSY or OFL.

For these data poor fisheries, a multiplier of the long-term median catch history will be used. The multiplier will be determined by the biological knowledge of the stock or stock complex, in light of the guidance provided by Restrepo et al. *(Section 2.2.2: Data Poor Situations*). The guidance recommends that the default control rule be implemented by multiplying the average catch from a time period where there is no quantitative or qualitative evidence of declining abundance ("Recent Catch") by a factor based on a qualitative estimate of relative stock size. The following guidelines were provided:

Above B_{MSY}	Limit catch = 1.00*Recent Catch
Above MSST but below B_{MSY}	Limit catch = 0.67*Recent Catch
Below MSST (i.e. overfished)	Limit catch = 0.33*Recent Catch

However, Restrepo et al. (1998) advises that because it will probably not be possible to analytically determine stock status relative to B_{MSY} for data poor stocks, an approach based on informed judgment will be necessary. The authors further state that "in cases of severe data limitations, qualitative approaches may be necessary, including expert opinion and consensus-building methods." As Tier 5 involves data poor situations, this ABC control rule does not include consideration of P*.

Determining the Acceptable Probability of Overfishing used in the ABC Control Rule
The ABC control rule for Tier 1-3 fisheries requires the Council to advise the SSC on the acceptable probability of overfishing (P*) in order for the SSC to calculate and recommend the ABC. As discussed above, P* refers to the acceptable probability or risk that actual catch equal to the ABC would exceed the OFL and thus, result in overfishing. NS1 guidelines require that the probability that overfishing will occur cannot exceed 50% and should be a lower value. Consequently, the Council adopted a maximum P* value of 50%; however, where adequate scientific information is available on the stock or stock complex, the Council will utilize a qualitative method for determining an appropriate P* that is lower than the maximum of 50%. This qualitative approach is described below.

Qualitative Analysis for Determining P*
The Council developed a process by which the risk of overfishing can be reduced from the 50% maximum P*. This approach, based on the approach developed by the South Atlantic FMC, is a qualitative method of determining P* that considers the amount of information available on the stock or stock complex, including scientific uncertainty, for the following dimensions: 1) assessment information, 2) assessment uncertainty, 3) stock status, and 4) productivity and susceptibility. Information on the four dimensions will be complied and analyzed by a team that may include Council and SSC members, Council staff, and other individuals knowledgeable in

the fishery, including stock assessment experts. Team members will use their knowledge and expertise to assign a single score for each dimension based on the criteria below. The maximum value for each dimension is 12.5 and the sum of the four dimensions has a maximum value of 50. The scores for each dimension will be added together for a final score, then be reduced from the maximum risk of overfishing (P^*_{MAX}) of 50. The team's analysis will be vetted through the Council process with the Council ultimately deciding the final P* value. The Council-approved P* would then be utilized in the calculation of the recommended ABC. An example of the qualitative analysis is provided below, but the exact criteria and scoring values used may change as deemed appropriate by the team for each assessed stock.

1) Assessment Information

Criteria	**Score**	
Quantitative assessment provides estimates of exploitation and B; includes MSY-derived benchmarks	0.0	
Reliable measures of exploitation or B, no MSY benchmarks, proxy reference points	2.5	X
Relative measures of exploitation or B, absolute measures of stock unavailable, proxy reference points	5.0	
Reliable catch history	7.5	
Scarce or unreliable catch records	12.5	

2) Assessment Uncertainty

Criteria	**Score**	
Complete. Key determinant – uncertainty in both assessment inputs and environmental conditions included	0.0	
High. Key determinant – reflects more than just uncertainty in future recruitment	2.5	
Medium. Uncertainties are addressed using statistical techniques and sensitivities, but full uncertainty is not carried forward in projections	5.0	X
Low. Distributions of F_{MSY} and MSY are lacking	7.5	
None. Only single point estimates; no sensitivities or uncertainty evaluations	12.5	

3) Stock Status

Criteria	**Score**	
Neither overfished nor overfishing. Stock is at high B and low exploitation relative to benchmark values	0.0	
Neither overfished nor overfishing. Stock may be in close proximity to benchmark values	2.5	X
Stock is either overfished or overfishing is occurring	5.0	
Stock is overfished and overfishing is occuring	7.5	
Either status criterion is unknown	12.5	

4) Productivity and Susceptibility

Criteria	Score	
Low risk. High productivity, low vulnerability, low susceptibility	0.0	
Medium risk. Moderate productivity, vulnerability, and susceptibility	5.0	X
High risk. Low productivity, high vulnerability, high susceptibility	12.5	

SCORE SUMMARY

Dimensions	Score
Assessment information	2.5
Assessment uncertainty	5.0
Stock status	2.5
PSA	5.0
Total Score	**15.0**
Risk of overfishing: **(P*=50 minus Total Score, where 50 equals P^*_{MAX})**	**35**

In the example above, the resulting P* of 35 could then be used in the ABC control rule equations available for stocks in any of the tiers 1 through 3. Benefits of this include the following: 1) it brings together multiple experts to determine the risk of overfishing based on their diverse knowledge; 2) it can be applied in both data rich and data poor situations, i.e. whether formal stock assessments can be conducted or not; and 3) it need not be repeated annually unless information suggests that circumstances have changed significantly.

Setting the Annual Catch Limit

NS1 guidelines require the Council to determine an ACL that may not exceed the SSC-recommended ABC; however, NS1 does not provide guidance on how to set an ACL below the SSC-recommended ABC. This section describes the methods the Council will use to set ACLs starting in 2011.

ACL will be set by the Council after considering the ABC provided by the SSC, as well as social and economic factors, pertinent ecological considerations, and management uncertainty. Management uncertainty stems from insufficient information about true catch (e.g. late reporting, underreporting and misreporting of landings), lack of management precision, and/or the ability to close a fishery before a catch limit is exceeded. NS1 guidelines suggest management uncertainty be accounted for during the establishment of AMs for a fishery, including ACTs; however, nothing precludes the Council from accounting for management uncertainty at the ACL step.

Method 1: Qualitative Construct for Setting an ACL

The ACL qualitative construct uses an approach similar to the P* qualitative construct. While the P* qualitative construct considers the amount of biological information (scientific uncertainty) available on the stock or stock complex, the ACL qualitative construct considers the amount of socio-economic information (management uncertainty) on the fishery that targets the stock or stock complex. Specifically, the dimensions that will be used for the ACL qualitative construct

would include the following factors: 1) Social; 2) Economic; 3) Ecological; and 4) Management uncertainty (SEEM). Aspects of the SEEM dimensions could include the importance of the fishery both socially and economically; consideration of the ecological importance of the stock or stock complex targeted by the fishery (e.g., is the stock a key indicator species of ecological health of the ocean), and whether managers can effectively constrain catch to planned levels.

Information on the SEEM dimensions will be compiled and analyzed by a team that may include Council and SSC members, Council staff, and other individuals knowledgeable in the fishery. This team will also be responsible for developing the criteria and scoring values regarding the quality and completeness of the information for each dimension. Like the P* qualitative construct, the scores for each dimension will be added together so that the total score is subtracted from a default value of 100% ABC (i.e., 100). Because SEEM analyses will be unique for each fishery, there are no specifics given at this time for the criteria or scoring values within the dimensions.

Method 2: Percentage Buffer for Setting an ACL

Under this method, the ACL would be set as a percentage of the ABC (e.g., ACL = 10% to 100% of the ABC) with the actual percentage dependent upon the amount of management uncertainty that exists in the fishery. For example, if management uncertainty is low, the ACL would be set close to 100% of the ABC. Alternatively, if management uncertainty is high, ACL would be set as a lower percentage. Factors that the Council will consider when selecting the percentage include late reporting, underreporting, and misreporting of landings in the fishery, as these factors contribute to the possibility that the true catch may actually exceed the ABC and ultimately the OFL of a fishery, thus resulting in overfishing. The justification for using this method over method 1 would need to be clearly identified by the Council when setting the ACL, as it is not a quantitative decision. However, it is useful to note that the ACL is a management decision for the Council to make, not necessarily a numerically-derived limit.

Method 3: Setting an ACL when an ACT will be Utilized

An ACT is an amount of annual catch of a stock or stock complex that is the management target of the fishery, and accounts for management uncertainty in controlling the actual catch at or below the ACL. When an ACT is used, it should be set lower than the ACL with a large enough buffer between the two reference points such that risk of exceeding the ACL is low. NS1 guidelines recommend ACTs in the system of accountability measures so that ACL is not exceeded. See Section 0 for a description of setting the ACT.

If the Council decides to use an ACT as a means to ensure an ACL is not exceeded, there are two options the Council may use in setting an ACL. Under the first option, the Council could simply set the ACL equal to the ABC. If this option is taken, management uncertainty will be accounted for at the ACT level using the ACT control rule. Under this option, in addition to management uncertainty, the Council could also consider social, economic and ecological factors to set the ACT and thus could apply the entire SEEM analysis described under Method 1 to set the ACT below the ACL. While NS1 guidelines do not require social, economic or ecological factors to be considered in setting the ACT, nothing precludes the Council from doing so, although the resulting ACT would be more precautionary than NS1 intends.

Under the second option, the Council would set the ACL less than the ABC using a modified Method 1 (Qualitative construct for setting ACLs) described above whereby the analysis for setting the ACL will only consider sociological, economic, and/or ecological factors. Under this option, management uncertainty will be accounted for at the ACT level using the ACT control rule (3-year running average).

As a performance measure for all ACL managed fisheries, if landings exceed the ACL for any stock or stock complex more than once in a four year period, the Council will re-evaluate the system of ACLs and AMs for the fishery and modify the system as necessary to improve its performance and effectiveness.

Suite of Accountability Measures

In addition to ACLs, the MSA also requires NMFS and the Councils to implement AMs (MSA §303(a)(15)). NS1 guidelines (74 FR 3178; January 16, 2009) explain that AMs are management controls to prevent ACLs from being exceeded and to correct or mitigate overages of the ACLs if they occur. The guidelines recommend FMPs describe AMs and how those measures are triggered. NS1 guidelines also suggest that management uncertainty be accounted for in establishing the AMs for a fishery, including uncertainty in the ability of managers to constrain catch and uncertainty in quantifying the true catch amounts. Since the purpose of ACLs and other harvest controls is to prevent overfishing, AMs are triggered at the ACL level to ensure the ABC and OFL are not exceeded and overfishing does not occur.

In fisheries for which in-season monitoring of catch is possible (i.e. fisheries with federal logbook reporting and State of Hawaii commercial fisheries, including MHI bottomfish), tracking of catch landings towards the ACL would be initiated at the start of each fishing year. When the ACL is projected to be reached, the commercial and non-commercial fishery sectors will be closed in federal waters for the remainder of the fishing year. For fisheries that rely on non-federal creel survey programs conducted by local marine resource management agencies, in-season tracking of catch landings may not be fully possible because availability of catch data is dependent upon local agencies workload and priorities. For these fisheries, the Council may employ overage adjustments as an accountability measure. If the Council determines at the end of a fishing year that total catch has exceeded the specified ACL for any fishery, the Council may reduce the ACL for the subsequent fishing year by the percentage or absolute value of the overage. However, one crucial aspect of this is that overages are typically factored into the subsequent year's stock assessment, as are any underages. For this reason, the Council will need to decide whether to include an overage adjustment if the overage has already been considered in a stock assessment, although stock assessments are typically not performed annually. However, as a performance measure for all ACL managed fisheries, if landings exceed the ACL for any stock or stock complex more than once in a four year period, the Council will re-evaluate the system of ACLs and AMs for the fishery and may modify the system as necessary to improve its performance and effectiveness.

In Method 3 of ACL specification options, ACTs may also be utilized as an accountability measure to ensure a fishery does not exceed its ACL.

The first approach utilizes an ACT control rule based on a 3-year running average of overages of a specified catch limit (e.g. TAC, quota, ACL, or ACT). The percentage or absolute value of the overage of a catch limit over a three year period will be reduced from the ACL in the following year. With this approach, if an ACL is not exceeded, a zero (0) percentage or absolute value will be attributed for that year. For example, assuming a static ACL of 100,000 pounds has been set annually for three consecutive years, and total catch exceeded the ACL in year 1 by 2,000 pounds (or 2%), year 2 by 6000 pounds (6%), and in the third year was 3000 pounds short (or 97,000 pounds), the ACT reduction would be calculated as a percentage as follows (2% + 6% + 0%)÷3 = 2.67%. In this example, ACT will be reduced by 2.67% (or 2,667 pounds) from the next 100,000 ACL, resulting in an ACT of 97,330 pounds in that following year. Alternatively, absolute values instead of a percentage could also be utilized. For example, using the same 100,000 pound ACL, the ACT would be calculated as follows: (2000 pounds + 6000 pounds + 0 pounds) ÷ 3 = 2,667 pounds, which results in that amount being reduced from the 100,000 pound ACL in the following year, or an ACT of 97,330 pounds. It is important to note, however, that assuming a static ACL for a number of years sequentially is unrealistic. More likely the ACL will vary annually due to fishery dynamics; therefore, using the percentage approach would likely be employed in these situations because this method allows the value of any overages to be standardized.

The second approach for setting an ACT is based on a percentage reduction from ACL using the SEEM analysis. This approach could be used regardless of whether an ACL is set equal to or less than the ABC. Under this approach, instead of applying the 3-year running average approach, the Council could apply the full SEEM analysis described under Method 1 to set the ACT below the ACL when the ACL equals the ABC. If ACL is set lower than the ABC because the social, ecological, and economic factors have already been taken into account, then the ACT can be set by using the 3-year running average approach described above or based on factors related to management uncertainty (i.e. the M part of the SEEM analysis).

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Appendix F: Fishing Management Plan for Wake Atoll and Wake Island Instruction 32-7001

FISHING MANAGEMENT PLAN

for

WAKE ATOLL

Collaboratively Prepared by

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Final

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1.0 Establishment of the Pacific Remote Islands Marine National Monument

On January 6th 2009 a proclamation signed by the President of the United States of America established the Pacific Remote Islands Marine National Monument (PRIMNM). The Pacific Remote Islands area consists of "units" Wake, Baker, Howland, and Jarvis Islands, Johnston Atoll, Kingman Reef, and Palmyra Atoll. This Marine National Monument is an important part of the most widespread collection of marine- and terrestrial-life protected areas on the planet under a single country's jurisdiction. They sustain many endemic species including corals, fish, shellfish, marine mammals, seabirds, water birds, land birds, insects, and vegetation not found elsewhere.

Wake Atoll is the most northern atoll in the Marshall Islands geological ridge and perhaps the oldest living atoll in the world. Though it was substantially modified by the United States to create a military base before and after World War II, its major habitats are the three low coral islands consisting of shells, coral skeletons, and sand, supporting atoll vegetation adapted to the arid climate.

Wake Atoll supports many species of resident nesting seabirds and many species of migratory shorebirds, including 2 species of tropicbirds, 3 species of boobies, the Great frigatebird, Sooty Terns, Brown and Black Noddies, Wedge-tailed and Christmas Shearwaters. Black-footed Albatross and Laysan Albatross recently recolonized Wake, making it one of the few northern albatross colonies outside the Hawaiian archipelago (Presidential Proclamation No. 9173).

Shallow coral reefs thrive around the perimeter of Wake Atoll. Fish populations are abundant and support at least 323 species, including large populations of Napoleon (humphead) wrasse (*Cheilinus undulatus*), a designated species of concern and candidate species under the Endangered Species Act (ESA); large schools of Bumphead parrotfish (*Bolbometopon muricatum*), currently considered a species of concern under the ESA, and several species of sharks (Zgliczynski et al. 2013). The environment beyond the shallow reefs and outer reef slopes descends sharply to great depths. The unique wishbone shape of Wake also provides a shallow lagoon environment that hosts many populations of fish and colorful giant clams. The lagoon covers 1.5 sq. miles and averages 10 ft. in depth depending on tidal conditions.

1.1 Management of the Marine National Monument

The Presidential Proclamation establishing the PRIMNM (the "monument" or "marine national monument") sets aside the monument for the purpose of protecting the objects identified above, all lands and interests in lands owned or controlled by the Government of the United States within the boundaries. The Secretary of the Interior, in consultation with the Secretary of Commerce, shall have responsibility for management of the monument, including out to 12 nautical miles from the mean low water lines of Wake Atoll, pursuant to applicable legal authorities. On June 17th, 2014 President Obama announced a proposal to expand the monument boundaries out to approximately 200 nautical miles from the mean low water line.

The Secretary of Commerce, through the National Oceanic and Atmospheric Administration

(NOAA), and in consultation with the Secretary of the Interior, shall have primary responsibility for management of the monument seaward of the area 12 nautical miles of the mean low water lines of Wake Atoll, with respect to fishery-related activities regulated pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.) and any other applicable legal authorities. The Secretaries of Commerce and the Interior shall not allow or permit any appropriation, injury, destruction, or removal of any feature of this monument except as provided for by the proclamation and shall prohibit commercial fishing within boundaries of the monument. However, the Secretary of Defense shall continue to manage Wake Atoll, according to the terms and conditions of 1972 Agreement between the Secretary of the Interior and Secretary of the Air Force, unless and until such Agreement is terminated. Until termination of the 1972 Agreement between the Department of Defense and the Department of Interior- the Department of Defense will continue to management the terrestrial portions of the Wake Atoll until jurisdiction of the Atoll is returned to the Department of the Interior.

Wake Atoll is currently managed by the Pacific Air Force Regional Support Center (PRSC) with daily functions executed by a base operating support (BOS) contractor. The installation functions in support of contingency deployments, serves as an emergency landing facility, provides fuel storage, and supports the needs of the Department of Defense. The BOS contractor supports the mission of the PRSC, 611th Civil Engineer Squadron (CES), Installation Management Flight and assists with the conservation and protection of the natural resources at Wake. The PRSC has a detachment (Det. 1) that consists of four on island military personnel to include the Installation Commander that oversees compliance of the BOS contract and ensures proper representation of the PRSC's mission in the Pacific. The BOS contract employs approximately 20 U.S. civilians in administrative and oversight positions and the day to day work is accomplished by approximately 80 Thai nationals. Other visitors to Wake typically include contractors that support installation projects and the Missile Defense Agency. The requirements of this fishing management plan are considered to be part of the 611th CES Installation Management Flight Program; and the reporting involved with this plan is considered to be included in the duties/activities of the BOS contract environmental department. The PRSC, Det. 1 will assist with the quality assurance of the data and ensuring the timeliness of the reporting.

1.2 Mission of the Wake Atoll Fishing Program

As mentioned above, waters surrounding Wake Atoll are part of the PRIMNM from the shoreline out to approximately 200 nautical miles from the mean low water line. The establishment of this monument means that everything within these waters is collaboratively managed by the U.S. Dept. of Interior -FWS and the Dept. of Commerce- NOAA, and the PRSC intends to assist these agencies in protecting the mission of this monument. The goals and objectives of the Wake Atoll Fishing Program:

- Maintain biological diversity within the monument waters surrounding Wake Atoll;
- Support the conservation of fish and their habitats through the management of these resources at Wake Atoll;
- Continue to provide opportunities for scientific research, environmental education, and compatible wildlife/fisheries- dependent recreational activities

1.3 History of Fish Consumption Health and Safety at Wake Atoll

In February/March 2002, the 36 Civil Engineer Squadron and the Air Force Center for Environmental Excellence Environmental Restoration Division conducted fish tissue sampling and finalized a Risk Evaluation of Chemical Levels in Fish Tissue at Wake Island Airfield (USAF 2002). The areas sampled were within the lagoon: Peale Island Bridge, boat harbor, and Wilkes Inlet. Samples from bonefish (*Albula)*, damselfish (*Neoniphon samara)*, goatfish (*Mulloides flavolineatus; Parupeneus barberinus*), and squirrelfish (*Sargocentron xantherythrum)* were collected from each of the sampling locations. Fish tissue data collected from the goatfish within the Wake lagoon detected levels of arsenic that exceed screening values. A recommendation was made in 2002 through an Installation Advisory that people should not eat seafood caught in the vicinity of the lagoon until more testing occurred. This preliminary data was too limited to evaluate whether people could have experienced harmful health effects from eating goatfish caught in the lagoon. In 2002 the Wake Island Commander (USAF 2002a) made the following recommendations:

- As a precautionary measure, people should continue to abide by the temporary seafood advisory until further sampling was done and results were analyzed (eat at your own risk).

- Detachment 3, 13th Air Force agreed that additional seafood sampling background of inorganic arsenic should be conducted in the future.

In 2012, a large rodent eradication effort was undertaken and as part of the project lagoon fish were collected and sampled for any residual rodenticide. A total of 50 seafood (Goatfish, Bonefish, Papio, Snapper, and Eel snakes) samples were collected from the lagoon area and five of those samples came back specifying rodenticide used during the project had made its way into those tissue samples. Subsequently, a fish consumption advisory reminder was re-issued to island residents until further notice. For further information please contact the AF Natural Resources Program Manager responsible for this installation.

There are some areas of the Atoll that fall under the environmental restoration program of the AF; these are areas of previously identified environmental contamination. Since these areas have been under the oversight of the AF environmental restoration program they have since been involved in remediation and are on the long road to environmental recovery. These areas have been marked with signage and island residents have been advised not to consume any seafood from these locations. The largest marine area that has been identified under the AF environmental restoration program at Wake is Peacock Point; this area is marked as Zone 3 on the Fishing Exclusion Zone Map in Attachment D. For further information contact the AF Environmental Restoration Program Manager responsible for this installation and reference the 2014 Informal Technical Information Report for OT010 Wake Island Airfield, Wake Atoll.

In 2014 further environmental restoration investigations were conducted at four sites potentially involving marine environments (SS041- Aircraft Staging Area, TU306 – Runway Staging Area UST and Abandoned Water Plant, LF007 – Landfill Site and OT011 – Burn Area

No.2). Based on previous investigative findings it appears that these sites may have experienced releases of contamination above applicable risk-based screening criteria (2013 Final Work Plan for Remedial Investigation through Decision Documents and Minor Site Actions at Multiple Sites). The Remedial Investigation/Feasibility Study (RI/FS) for these sites is currently on going to characterize if potentially unacceptable human health and ecological risks are identifiable. Until this report has been finalized and cleared of any potential risk to human health, this area identified as Zone 4 on the Fishing Exclusion Zone Map in Attachment D will remain in effect.

2.0 Wake Atoll Marine Species

During a 1998 marine biological survey, a total of 122 species of reef fishes, 41 species of corals, 39 species of other macro invertebrates, and 19 species of macro algae were recorded at Wake Atoll (SMDC 1999). Much of the reef remains unsurveyed and it is likely that many more species among all groups are present at the atoll. Lobel and Lobel (2004) found 321 species of reef fish from Wake Atoll, signifying that as effort increases, so does the length of the species list.

The waters of Wake support a large population of fish including the Bumphead parrotfish (*Bolbometopon muricatum*), the Humphead wrasse (*Cheilinus undulatus*) commonly also referred to as the Napolean wrasse, mullet (*Mugilidae*), convict tangs (Acanthuridae), flagtails (*Kuhliidae*), goatfish (*Mullidae*), papio (*Carangoides orthogrammus*), bonefish genus (*Albula)*, and snappers (*Lutjanidae*). The surrounding outer reefs harbor a diverse assemblage of reef fish including, parrotfishes (*Scaridae*), sugeonfishes (*Acanthuridae*), wrasses (*Labridae*), butterflyfishes (*Chaetodontidae*), and damselfishes (*Pomacentridae*). Near shore fishes are important for food and recreational purposes, these species typically include groupers, emperors, and jacks. Attachment A includes a photographic listing of some common Wake Atoll fish.

A recent 2014 marine survey was conducted by NOAA as part of a long term monitoring program known as the Pacific Reef Assessment and Monitoring Program (Pacific RAMP). NOAA has been conducting marine monitoring at Wake under this program for 10 years, current and previous reports have indicated a healthy mean fish biomass for marine species of Wake. 100 hours of snorkel and scuba surveys conducted in 2011 and a report published in 2012 by NOAA scientists studied spawning characteristics and reproductive behavior of Bumphead parrotfish in great numbers (246 individuals) off the west-side of Wilkes Island (Muñoz RC 2012). A high frequency of the Bumphead parrotfish has also been noted in the lagoon near the Prisoner of War (POW) rock; hence this area (Zone 2) and the area on the west-side of Wilkes (Zone 1) have both been identified on the Fishing Exclusion Zone Map in Attachment D. However, due to lack of sufficient additional information at this time fishing is allowed ONLY in fishing areas A and B circled in blue on the map.

Green sea turtles (*Chelonia mydas*) have been observed in the lagoon and the channel between Wake and Peale Islands, therefore the water of these areas are considered to be sensitive habitats. Additionally, Hawksbill sea turtles (*Eretmochelys imbricata*) and Leatherback turtles (*Dermochelys coriacea*) have been suspected to occur in and around Wake Atoll (USAF, 1994). Sharks are abundant at Wake, particularly grey reef sharks (*Carcharhinus*

amblyrhynchos), black-tipped reef sharks *(Carcharhinus melanopterus)* are notably less abundant. The giant clam (*Tridacna maxima*) is commonly found in the near Wake Atoll shores. Several threatened and endangered marine mammals may also be found in the vicinity of Wake Atoll including; Blue whale (*Balaenoptera musculus*), Fin whale (*Balaenoptera physalus*), Humpback whale (*Megaptera novaeangliae*), Cuvier's beaked whale (*Ziphius*

cavirostris) and Sperm whales (*Physeter macrocephalus*), Hawaiian monk seal (*Monachus schauinslandi*) as well as Spinner (*Stenella longirostris*) and bottle-nosed dolphins *(Tursiops truncatus*). The table below outlines the marine species known to exist in and around Wake Atoll that have varied levels of status under the Endangered Species Act.

Table 1.0 Wake Atoll Aquatic Species of Concern

Installation	Common Name	Scientific Name	Status
Wake Atoll AFB	Green sea turtle	*Chelonia mydas*	Threatened Species
Wake Atoll AFB	Hawksbill sea turtle*	*Eretmochelys imbricata*	Endangered Species
Wake Atoll AFB	Humphead wrasse	*Cheilinus undulatus*	Candidate Species and Species of Concern
Wake Atoll AFB	Bumphead parrotfish	*Bolbometopon muricatum*	Species of Concern
Wake Atoll AFB	Giant clam	*Tridacna maxima*	Low-Risk Conservation Dependent

*Note: This species has not previously been observed at Wake Atoll however it is assumed to be due to surveys at various atolls thought out the Marshall Islands.

2.1 Key Endangered Species Act (ESA) Terms and Definitions

Candidate Species: Plants and animals that have been studied and the Service has concluded that they should be proposed for addition to the Federal endangered and threatened species list. These species have formerly been referred to as Category 1 Candidate species. From the February 28, 1996 Federal Register, page 7597: "those species for which the US Fish & Wildlife Service and the National Oceanic Atmospheric Administration (NOAA) has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposed rule to list but issuance of the proposed rule is precluded."

Critical habitat: Specific geographic areas, whether occupied by listed species or not, that are determined to be essential for the conservation and management of listed species, and that have been formally described in the Federal Register.

Ecosystem: Dynamic and interrelating complex of plant and animal communities and their associated nonliving (e.g. physical and chemical) environment.

Endangered Species: The classification provided to an animal or plant in danger of extinction within the foreseeable future throughout all or a significant portion of its range.

Proposed species: Any species of fish, wildlife, or plant that is proposed in the Federal Register to be listed under Section 4 of the Endangered Species Act.

Species of Concern: A species that is not being considered actively for listing under the Endangered Species Act but for which significant concerns or uncertainties regarding its biological status and/or threats exist (69 CFR 19975). A species of concern status does not carry any procedural or substantive protections under the ESA. This term is also commonly referred to as "candidate species".

Threatened Species: Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range as defined in the Endangered Species Act.

3.0 Wake Atoll Fishing Guidelines

Recreational and sustenance fishing both play important roles in the morale and welfare of island residents and visitors to Wake Atoll. This fishing management plan has been developed for two reasons; to provide information and educate those who enjoy and appreciate the marine environment at Wake and to establish guidelines to support and maintain a healthy marine ecosystem for many years to come. In order to maintain a sustainable fishing environment/program for Wake Atoll, the PRSC has applied for a Special Use Fishing Permit (or a Conservation and Management Permit) with the USFWS and the following guidelines will be implemented until issuance of the permit has been received by the USAF/PRSC. This permit system will track numbers of fishermen, gear types used, effort, and harvest information that will ensure the Wake fishery is sustained, impacts to sensitive species are avoided, and a quality fishing experience can be had now and into the future. This Fishing Management Plan is also part of a larger AF installation natural resources management plan that has been prepared in accordance with the Sikes Act Improvement Act (SAIA) in cooperation with the NOAA and USFWS.

3.1 Open Ocean Fishing at Wake Atoll

Fishing in pelagic (200 ft. depth or greater) waters of Wake Atoll is a rare and exciting opportunity. Some of the more common pelagic species that are retained and consumed near Wake include: ʻAhi (Yellowfin tuna) (*Thunnus albacares*), Aku (Skipjack tuna) (*Katsuwonus pelami)*, Ono (Wahoo) (*Acanthocybium solandri*), and Mahimahi (*Coryphaena hippurus*). Poundage or quantity consumption limitations of pelagic fish of Wake can be found in Section 3.4 of this document. The bullets below outline the best management practices for the purpose of sustenance fishing of pelagic species at Wake Atoll:

- All fishing excursions by vessels will be logged, and permission will be granted to those whose names have been provided to the boat captain and the Environmental Office;
- The "permittees" engaged in pelagic fishing may only catch AND keep fish in quantities needed for on-island consumption;
- The use of nets from boats in the open ocean is **NOT** permitted;
- Fish should not be frozen for more than two weeks;
- Fish are **NOT** permitted to leave the atoll;

- Fish are allowed to be caught by rod and reel or hand lines and surface trolling with lure, and hook (with natural or artificial bait);
- Every pelagic species caught (both kept for consumption and thrown back) will be logged;
- Opting to not use wire leaders may help minimize the bycatch of sharks, if a shark is accidently caught fisherman should be prepared to quickly release.

NOTE: Fishing for sharks in pelagic waters of the Pacific Remote Island Area of Wake would require a fishing permit pursuant to 50 CFR 665.801(f) and is therefore a prohibited activity in the waters surrounding Wake Atoll.

3.2 Reef & Lagoon Fishing at Wake Atoll

Wake Atoll reef and lagoon fishing is a common and enjoyable activity for island residents and visitors (Attachment A shows a photographic inventory of many common reef and lagoon fish at Wake). There are some species with special status (Humphead wrasse, Bumphead parrotfish, Green sea turtles, and Giant Clams) that are known to occur within the waters of Wake and extra caution should be exercised when fishing in areas where these species are observed. The following best management practices are to be implemented when fishing on the reef or in the lagoon at Wake:

- Fishing at Peacock Point and all areas shaded red on the Fishing Exclusion Map in Attachment D is **NOT** permitted, some of these areas are considered active restoration sites for both, physical and environmental health hazards (see Attachment D);
- When fishing catch and release, barbless hooks will be used (barbs may be filed down, bent with pliers or barbless hooks maybe purchased);
- The "permittees" engaged in reef and lagoon fishing may only catch fish in quantities needed for on-island consumption **(see section 3.4 for quarterly limits);**
- Fish should not be frozen for more than two weeks;
- Fish are **NOT** permitted to leave the atoll;
- When lagoon or reef fishing - every species kept for **consumption** will be logged;
- Fish are allowed to be caught by rod and reel or hand lines with lure, bait and hook (with natural or artificial bait);
- Fishing with any kind of nets, including cast nets or fixed nets, and trolling within the lagoon and in shallow waters around Wake Atoll is NOT permissible**;**
- Lines or hooks that get stuck or caught on the reef should be retrieved is possible as safety permits; if you are not comfortable in the water and do not try to retrieve the hook;
- Humphead wrasses and Bumphead parrotfish are NOT permitted to be caught, it is expected that all Humphead wrasses and Bumphead parrotfish that are accidently caught will be immediately released, logged, and recorded;
- Some areas marked in red on the map in Attachment D are known for high frequency of Humphead wrasses and Bumphead parrotfish and are considered fishing exclusion zones permanently, at this time fishing is allowed ONLY in fishing areas A and B circled in blue on the map.

- Coral reefs are protected under E.O. 13089 and all activity near and around Wake's coral reefs will be done cautiously to avoid any damage;
- The use of spearguns on Wake is prohibited; the use of three prong spears and Hawaiian slings is permissible during daylight hours **only.**

NOTE: Pursuant to 50 CFR 665.934 (d) Non-commercial fishing (which includes catch and release fishing) for sharks is prohibited within 12 nautical miles of emergent lands of the PRIMNM, unless authorized by the USFWS, in consultation with NOAA- National Marine Fisheries Service (NMFS). Should the USFWS consider allowing this activity within 12 nautical miles of Wake Atoll, certain coral reef shark species would require a special coral reef ecosystem fishing permit pursuant to 50 CFR 665.624.

NOTE: It is important to be aware that reef fish occurring within or near the coral reef system may contain ciguatoxin, which can be dangerous or lethal if consumed by humans. Ciguatoxins are caused by the presence of certain microplankton or dinoflagellates naturally present in the marine ecosystem which bioaccumulate in some reef fish. Ciguatera is defined as seafood poising due to ciguatoxin, a toxin acquired by eating fish that have consumed these microplankton or dinoflagellates, or fish that have consumed other fish that have become toxic. When humans eat these fish, they suffer seafood poisoning. Some common contaminated reef species can include: barracuda, grouper, red snapper, and moral eels.

3.3 Reporting Requirements for Fishing Activities at Wake Atoll

The purpose of these reporting requirements is to track and record the sustainable fishing and consumption practices of the aquatic natural resources surrounding Wake Atoll; and in order to maintain those practices residents and visitors to Wake Atoll will comply with the following:

- All fisherman (resident or visitor) of Wake Atoll will r**e**ad and acknowledge that they understand the Wake Atoll Fishing Guidelines (contained in this Fishing Management Plan);
- Your name must be on the Wake Atoll Fishing Registry (see Wake Island Environmental Office) to fish in the waters of Wake Atoll;
- Use Attachment B to report all fish kept for on-island consumption from the shores of Wake, Wilkes, or Peale;
- Use Attachment C to report all fish caught from vessels around Wake;

- All fisherman will submit monthly fishing logs to the Wake BOS Environmental Office;
- All fisherman will record dates, numbers, and quantities accurately and submit timely;
- Wake BOS Environmental Tech will summarize catch data and activities and submit quarterly to the 611th CES, Wake Atoll Natural Resource Manager;
- Report any known Wake Atoll Fishing Management violations to the BOS Contractor Environmental Division.

3.4 Fish Consumption Limitations for Wake Atoll

Per 50 CFR 665.935 the 611 CES will be applying for a permit to catch and consume fish within the immediate waters of Wake Atoll. The 611 CES has outlined the guidelines in this Fishing Management Plan as well as the following consumption limitations for Wake Atoll that will be submitted to the USFWS with the permit application. The 611 CES considered the following components when establishing the consumption limitations outlined below:

- The number of current Atoll residence (avg. 100 – 120)
- The average number of fisherman (30-40)
- The average available time for fishing (Tues – Sat. late afternoons and weekends)
- Typical fish consumed by Atoll residence (outlined in Appendix A)
- The 2008 USFWS Midway Sustenance Fishing Compatibility Determination (see below for Midway consumption comparison)

Quarterly Wake Atoll Fish Consumption Limitations:

- Pelagic Fish will be limited to 2,500 lbs. per quarter, assume the following average weights for: Ahi (15 lbs.), Aku (15 lbs.), Wahoo (25 lbs.), and Mahimahi (20 lbs.);

- Reef and Lagoon Fish kept for on-island consumption will be counted together and limited to 1,500 lbs. per quarter. Assumptions: on average each reef and lagoon fish kept weighs 3 lbs. each, assuming that there are on average 30 people fishing AND consuming reef and lagoon fish every weekend, those 30 fishermen would be allowed to keep and consume an estimated 5.5 fish per weekend;

Midway Atoll Sustenance Fishing Limitations: (for reference only)

- Consumption of pelagic fish ONLY
- Lures only - no bait allowed
- Fish must be consumed the same day or refrigerated for no more than 2 days - no frozen fish allowed
- 300 pelagic fish may be consumed (208 for island residents and up to 92 for vessel-based sustenance fishing)
- 300 fish / year x 50 lb. avg. = 15,000 lbs. / year
- 50 lbs. / person / year (or) 4.1 fish / person / month

4.0 Works Cited

Lobel, P.S., and L.K. Lobel, 2004. *Annotated Checklist of the Fishes of Wake Atoll*. Pacific Science 58(1):65-90.

Muñoz RC et al. 2012. Zgliczynski BJ, Laughlin JL, Teer BZ, Extraordinary Aggressive Behavior from the Giant Coral Reef Fish, *Bolbometopon muricatum*, in a Remote Marine Reserve. PLoS ONE 7(6): e38120. doi:10.1371/journal.pone.0038120).

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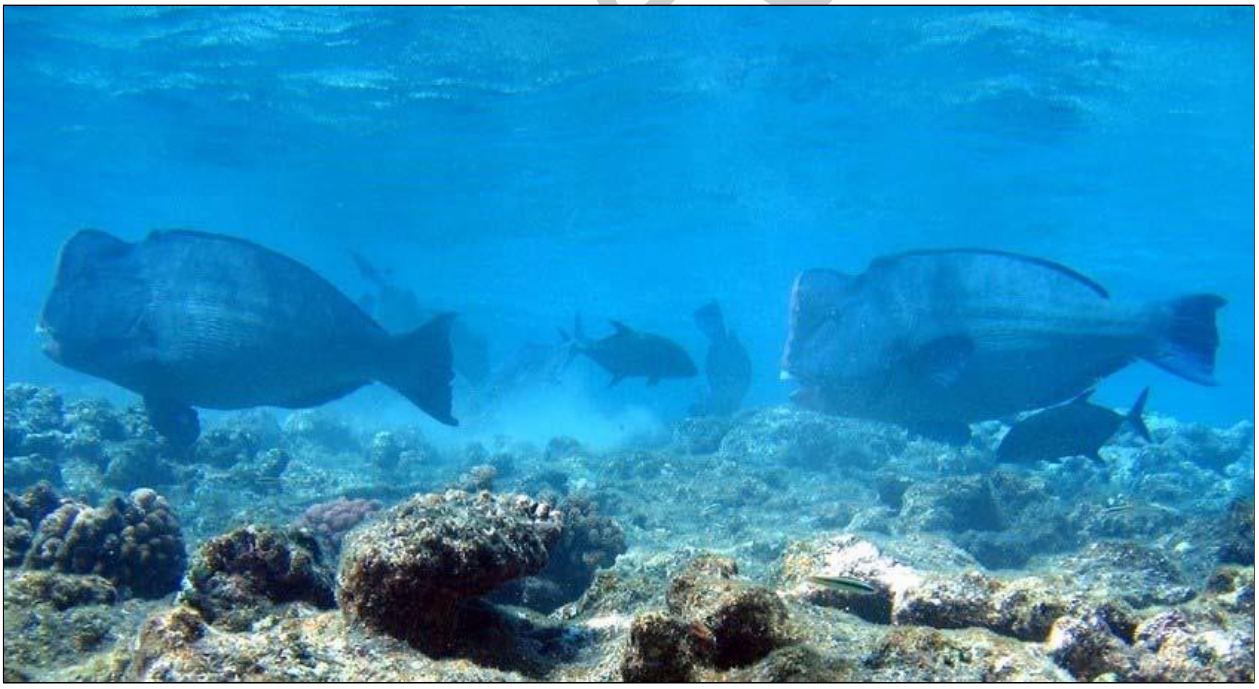
Zgliczynski et al. 2013. Zgliczynski BJ, Williams ID, Schroeder RE, Nadon MO, Richards BL, Sandin SA. The IUCN red list of threatened species: and assessment of coral reef fishes in the US Pacific Islands. Coral Reefs. 2013;32:637-650. doi: 10.1007/s00338-013-1012-0.

Common Lagoon and Reef Fish of Wake Atoll

Bonefish, (*Albula)* Photographer: Don Teig, USAF

Bluefin trevally, Ulua, Papio -juvenile, (*Caranx melampygus)* Photographer: Don Teig, USAF

Bluefin gurnard, Kumu, (*Chelidonichthys kumu)* Photographer: Brian Gratwicke

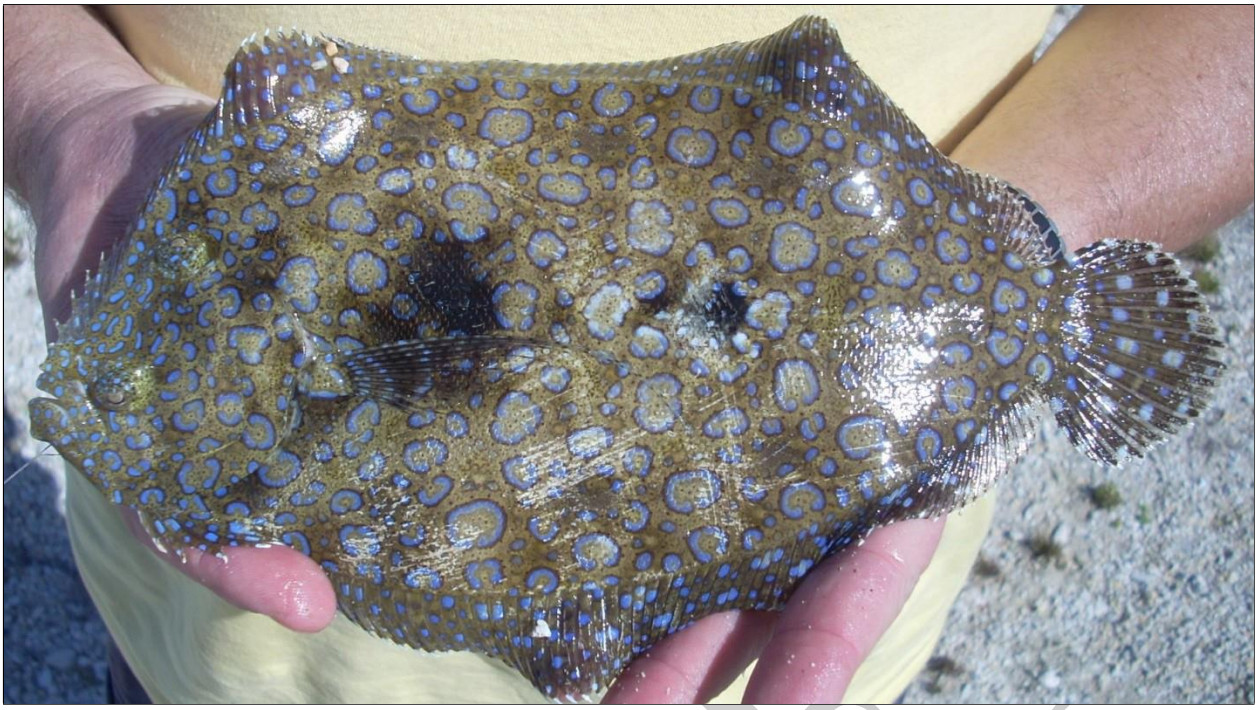


Bumphead Parrotfish*, (*Bolbometopon muricatum)* Photographer: Richard Ling

*This fish is considered to be a species of concern under ESA

Pacific Highfin Chub Fish (possible - *Kyphosus cinerascens)* Photographer: Don Teig, USAF

Convict Surgeon, Manini, (*Acanthurus triostegus)* Photographer: Brian Gratwicke, Flicker



Flower flounder or Common flounder, (*Bothus mancus)* Photographer: Don Teig, USAF

Floral Wrasse (*Cheilinus chlorourus*) Photographer: Don Teig, USAF

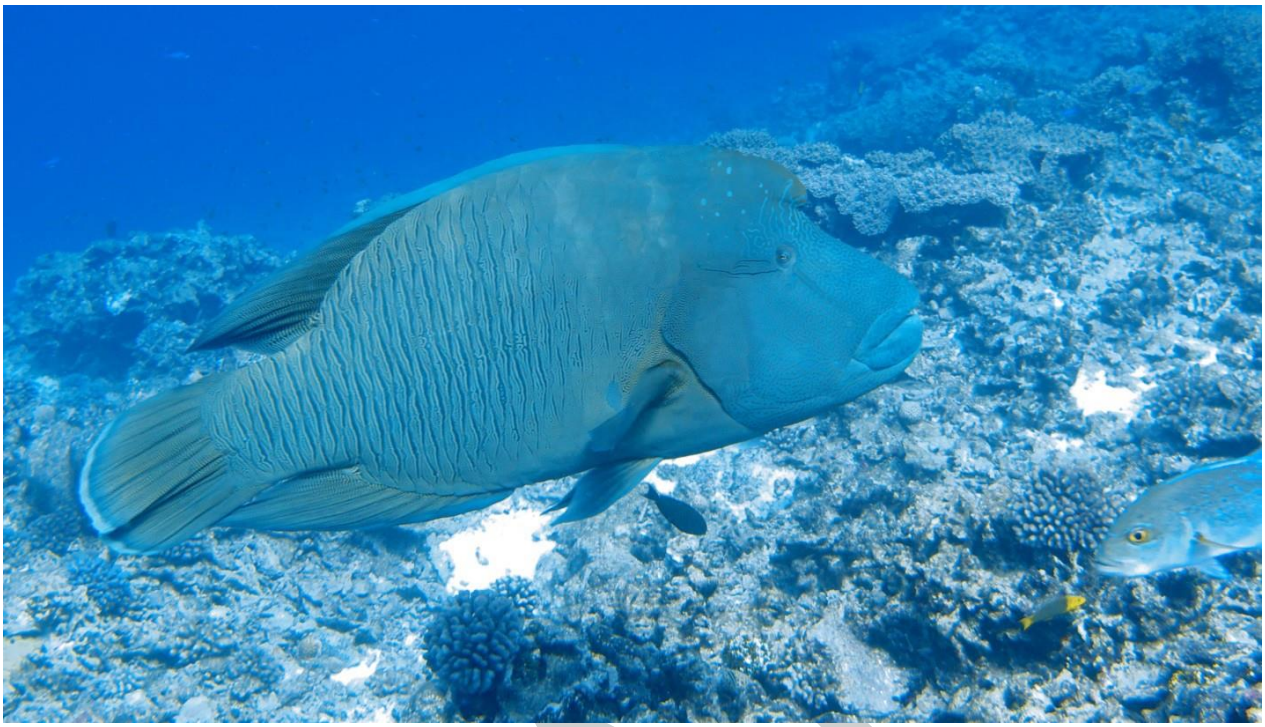
Goatfish, (*Mullidae*) Photographer: Don Teig, USAF

Greasy Grouper, (*Epinephelus tauvina*) Photographer: Don Teig, USAF

Hawaiian Flagtail, (*Kuhlia sandvicensis)* Photographer: Bryan Harry, NPS

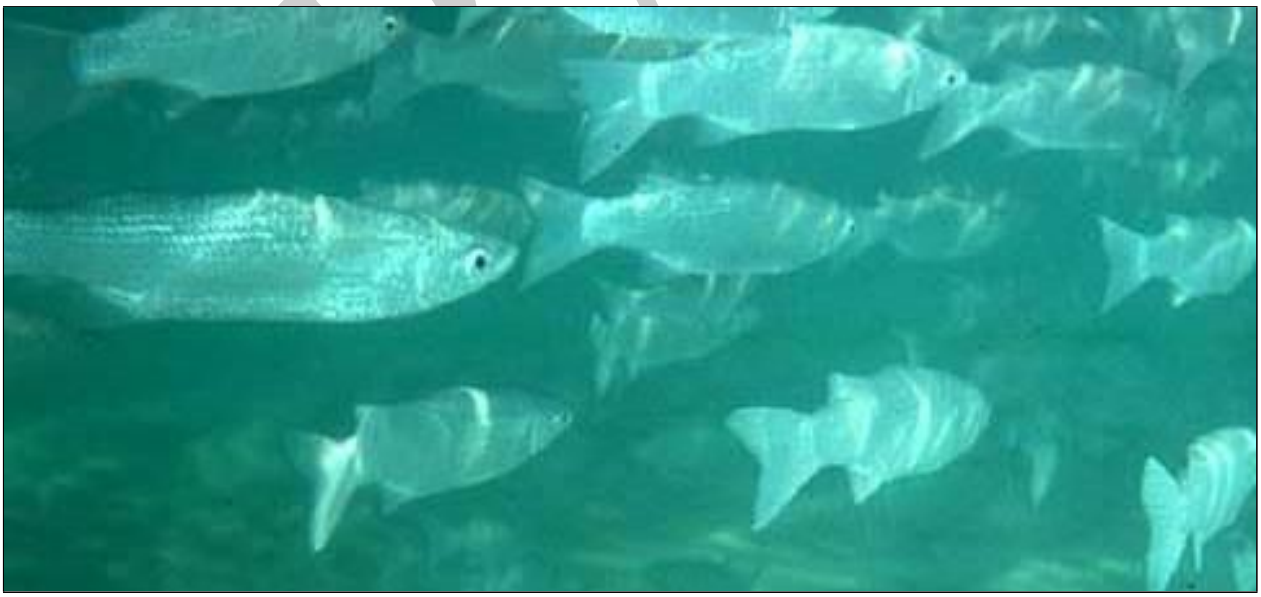
Female Humphead wrasse*, aka Napolean wrasse, (*Cheilinus undulatus)*
Photographer: Brian Zgliczynski

*This fish is a candidate species for listing under ESA



Male Humphead wrasse*, aka Napolean wrasse, (*Cheilinus undulatus)*
Photographer: Brian Zgliczynski

*This fish is a candidate species for listing under ESA



Mullet *(Neomyxus chaptalii)* Photographer: Bryan Harry, NPS

Coronetfish (family *Fistulariidae*) Photographer: Don Teig, USAF

Needle Fish (family *Belonidae*) Photographer: Don Teig, USAF

Spotted Grouper, (*Epinephelus hexagonatus*) Photographer: Don Teig, USAF

Wake has many different species of Snappers, this one is believed to be a:

Onespot Snapper (*Lutjanus monostigma*) Photographer: Don Teig, USAF

Squirrelfish (*Sargocentron spiniferum*) Photographer: Don Teig, USAF

Lagoon triggerfish (*Rhinecanthus aculeatus*) Photographer: Don Teig, USAF

The surrounding reefs harbor a diverse assemblage of reef fish including; many species of parrotfishes (Scaridae), sugeonfishes (Acanthuridae), wrasses (Labridae), butterflyfishes (Chaetodontidae), and damselfishes (Pomacentridae).

Attachment B:

Pelagic Fishing Log

Wake Atoll
Reef and Lagoon Fishing Log

Date	Name	Location	Level of Effort	Species	Weight	Caught and Kept
EXAMPLE LOG						
5/1/2014	Joel Helm	Ioke Beach House	15 mins	Weke	1lb	Yes
5/1/2014	Joel Helm	Ioke Beach House	25 mins	Papio	2lbs	Yes
5/5/2014	Kristen Rex	Ioke Beach House	2 hrs	Bonefish	2lbs	No

This log sheet is to be turned into the BOS Contractor Environmental Office at the end of every month.

Wake Atoll
Reef and Lagoon Fishing Log

Date	Name	Location	Level of Effort	Species	Weight	Caught and Kept

This log sheet is to be turned into the BOS Contractor Environmental Office at the end of every month.

Attachment C:

Reef and Lagoon Fishing Log

Wake Atoll
Pelagic Fishing Log

Date	Name	Vessel	Location	Level of Effort	Species	Weight	Caught and Released	Caught and Kept
EXAMPLE LOG								
5/4/2014	Mark Stone	Whaler 1	S/W side of Wake	2 hrs	Ono	25 lbs	X	
5/4/2014	John Burns	Whaler 1	S/W side of Wake	.5 hrs	Mahi Mahi	20 lbs		X
5/4/2014	John Burns	Whaler 1	Outside of Marina	1.5 hrs	Reef shark	3 Ft	X	

This log sheet is to be turned into the BOS Contractor Environmental Office at the end of every month.

Wake Atoll
Pelagic Fishing Log

Date	Name	Vessel	Location	Level of Effort	Species	Weight	Caught and Released	Caught and Kept

This log sheet is to be turned into the BOS Contractor Environmental Office at the end of every month.

Attachment D:

Fishing Exclusion Zone


Fishing area A
Zone 2
Zone 1
Fishing area B
Atoll Lagoon
AREAS IN RED ARE CONSIDERED "NO FISHING ZONES"
Zone 4
Zone 3
Pacific Ocean

APPENDIX O
WII-32-7001, ENVIRONMENTAL COMPLIANCE AND PROTECTION OF NATURAL RESOURCES

BY ORDER OF THE COMMANDER
WAKE ISLAND AIRFIELD

WAKE ISLAND INSTRUCTION 32-7001
22 August 2008

Civil Engineering

Environmental Compliance and
Protection of Natural Resources

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

OPR: CSSI / Environmental
Supersedes: All Wake Island Guidance, This Subject

Certified by: Det. 1, 15 AW/CC (Maj Waters)
Pages: 7, 4 attachments
Distribution: F

This instruction provides guidance for the protection of natural resources at Wake Island Atoll within the purview of the commander of Wake Island Airfield. The following policies, codes, and public laws serve as references for this instruction:

References

- Internal Security Act of 1950, *Public Law (P.L.) 81-831, 64 Statute 1005*, 50 United States Code (USC) *783, et seq.*
- Endangered Species Act of 1973*, P.L. 93-205, 87 Statute 884*, 16 USC *1531*
- Migratory Bird Treaty Act of 1918, 16 USC *703-712, Chapter 128, 40 Statute 755*
- Lacey Act Amendments of 1981, *P.L. 97-79, 95 Statute 1073*, 16 USC *3371-3378 as amended by P.L. 98-327, 98 Statute 271*.
- Code of Federal Regulations (CFR), 50 CFR *32.71, Coastal Zone Management*
- Code of Federal Regulations (CFR) 50 CFR Part 17, Endangered and Threatened Wildlife and Plants
- Convention for the International Trade of Endangered Species (CITES)
- Executive Order (E.O.) 13089, June 11, 1998; *Coral Reef Protection*
- Uniform Code of Military Justice (UCMJ), Article 134
- Marine Mammal Protection Act of 1972 (amended 1994), (CFR) 50 CFR *216*

1. APPLICABILITY: This Instruction applies to all personnel involved in the daily use of Wake Island Airfield (AWK) Atoll. All personnel must adhere to this policy.

2. POLICY: It is the policy of the Department of Defense (DoD) and the United States Air Force (USAF) to apply all laws restrictions and regulation to its properties within the confines of the military mission.

3. REGULATION: All US regulation regarding Natural Resources will be adhered to on Wake Island Atoll within the constraints of the military mission. All personnel at Wake Island Atoll are subject to these applicable Codes, Regulations, Public Laws, Acts, and Statutes.

4. PENALTY: The commander and their designated representatives will set and enforce all policy within the confines of the Wake Island Airfield mission. All personnel are required to follow this guidance immediately. Violators may be subject to civil or criminal penalties under the laws and regulations of the United States, including the Uniform Code of Military Justice where applicable. Violations committed by non-DOD contract personnel will result in contract review to determine whether appropriate adjustments are necessary under the default provisions of the contract.

4.a. GENERAL RESTRICTIONS FOR WAKE ISLAND ATOLL:

4.a.1. Marine Birds: It is prohibited for any person to harass, willfully disturb, hunt, trap, capture, possess or kill any bird, or take any eggs of any bird, except as specifically authorized by the installation commander, Bird Aircraft Strike Hazard (BASH) Committee, or the environmental office at Wake.

4.a.2. Turtles And Endangered Species: It is prohibited for any person to harass, willfully disturb, hunt, trap, possess or kill any individual of any species that has been designated as threatened or endangered pursuant to the Endangered Species Act. All turtles (dead or alive) found in Wake Island Atoll, whether encountered on land or in water, are protected by this act including turtle shells, carcasses, and other trophy=s that will not be removed from the atoll.

4.a.3. Marine Mammals: It is prohibited for any person to harass, willfully disturb, hunt, trap, possess or kill any marine mammal except under the authorization of a federal permit. Monk seals, which may be encountered in the lagoon or on beaches on Wake Atoll, are also protected under the Endangered Species Act.

4.a.4. Importation of Marine Species: The importation of any species of marine fish, mollusk, crustacean, or other organism is prohibited.

4.a.5. Shrubs within the Clear Zones: The Bird Hazard Working Group (BHWG) is the determining authority for cutting or removal of shrubs within the Clear Zones.

4.a.6. Approved Trash / Refuge Containers: Residents and visitors to Wake Island Atoll will discard all trash, fishing line, excess camping materials, and etc. into approved trash / refuge containers. All materials taken to Wilkes and Peale Islands will be returned to Wake Island for proper removal.

4.b. RESTRICTIONS FOR SPECIFIC AREAS ON AND SURROUNDING WAKE ISLAND ATOLL:

4.b.1. Wilkes Island Marine Bird Reserve: It is prohibited to enter the Wilkes Island Marine Bird Reserve without written permission of the commander or designated representative (currently Base Operations and the Environmental Office).

4.b.2. Entry Authorization Form: Obtain form from the Environmental Office.

4.c. RESTRICTIONS ON TAKING MARINE LIFE FROM WAKE ISLAND ATOLL:

4.c.1. Collection of Coral: Harvesting, collection or possession of all living coral from Wake Island Atoll is prohibited, Dead coral for personal use may be removed from the atoll with a permit from the Environmental Office (see section 5).

4.c.2. Living Shells: The possession or transport of living shells from Wake Island is prohibited. A live shell is considered any shell with a living organism inside of it, including a mollusk or hermit crab. Harvesting of live shells for personal use or collection on island is also prohibited. This includes, but is not limited to:

4.c.2.a. CLAM SHELLS: Removal of live giant clam shells, from the Family TRIDACNIDAE, from the water is prohibited.

4.c.2.b CONCH SHELLS: Removal of live conch shells, from the Family STROMBIDAE, from the water is prohibited.

4.c.2.c. COWRY SHELLS: Removal of live cowry shells, from the Family CYPRAEIDAE, is prohibited

4.c.3. Other Shells: Collection and transport off Wake Island of beach combed shells with no living organisms inside is allowed. Transport off Wake Island is limited to personal use by permit (see Section 5)

4.c.4. Commercial Fishing: Commercial fishing, (fishing for monetary gain of any kind) is not allowed. Reasonable quantities of fish caught for personal consumption on island is allowed. Fish are NOT permitted to leave the atoll.

4.c.5. Live Reef Fish: Live reef fish may be caught and kept in an aquarium but will not be shipped off the island.

4.c.6. Lobsters: No lobsters may be taken at any time.

4.c.7. Octopus: Octopi, From the Family OCTOPODIDAE, may be taken but only one animal per fisherman per day is allowed (i.e. diver or snorkel swimmer actively engaged in the capture). It is prohibited at any time to take an octopus of less than one pound weight.

4.c.8. Shark Fishing: No sharks or rays may be taken. This includes, but is not limited to:

- Gray reef shark (Carcharhinus amblyrhynchos)
- Blacktip reef shark (Carcharhinus melanopterus)
- Whitetip reef shark (Triaenodon obesus)
- Tiger Shark (Galeocerdo cuvier)

Sharks or rays that are hooked unintentionally while fishing for other species will not be boated or hauled into land; they will be reeled in close to the boat or shore and the line cut as close to the shark as safely as possible. Sharks and rays will not be gaffed or killed in order to retrieve lures. Shark teeth or parts found on beach may be removed from the island for personal use by permit (Section 5).

4.c.9. Fishing from the Shore: Fishing from the shore is limited to collecting with rod-and-reel in allowable ares only(see Fishing Managment Plan). Shoreline fishing is defined as fishing from any land area in the atoll. (e.g. beaches, jetties, piers, docks, or wharves including any boat tied off to one of these structures). It is prohibited to use gill, lay, drag, or seine nets from shore or boats. The capture of fish, shellfish, and other marine species through the use of stationary traps is prohibited. The capture of marine life through the use of chemical or mechanical means that result in damage to the coral reefs is prohibited. Bumphead parrotfish (*Bolbometopon muricatum*) and Napoleon wrasse (*Cheilinus undulatus*) may not be taken. If either of these fish are unintentionally hooked while fishing from shore, the hook should be removed or the line should be cut as close to the fish as possible.

bumphead parrotfish

Napolean wrasse

5. PERMITS: Permits for harvesting live organisms and/or removal of wildlife from Wake Island Atoll are available from the Environmental Office. The original permit and as many copies as necessary will be affixed to shipments containing such items leaving

Wake Island. Hand-carried permits must accompany items transported in person and must be submitted to military, customs and/or US Fish and Wildlife Service authorities at port of entry if requested. Copies of the permits will be kept at the Environmental Office for internal records.

6. POSTING OF REGULATIONS: This instruction shall be posted in a highly conspicuous manner at the air terminal bulletin board, boathouse, dinning facility bulletin board, the office of the peace officer and all managers. It is the responsibility of the managers to disseminate this information immediately to the personnel under their purview. General regulations must be briefed to incoming personnel upon arrival to Wake Island, and the specific regulations on marine resource use/harvest must be briefed prior to sanctioned diving and pelagic fishing excursions.

7. PENALTIES FOR VIOLATION: Persons violating the provisions of this instruction will be subject to the applicable civil and criminal penalties prescribed by Public Law listed in the references for this instruction.

See the following Pages for forms and a map of the atoll area showing restricted entry areas.

BRADLEY D. WATERS, Maj., USAF
Commander, Det 1/15 AW, Wake Island

Wake Island National Resource Permit

For natural resource items harvested and/or transported off Wake

Name (Last, First, M.I.), Address Wake and U.S. Telephone Number Wake and U.S.	

Itemized List: (e.g. 3pc.)	Be as specific as possible in the description(e.g. yellowfin tuna steaks, 20 lbs)
Beachcombed Coral, personal use only	
Live Shells Prohibited Dead Shells, personal use beachcombed only	
Beachcombed shark carcass or parts, personal use only	
Other	

I acknowledge that the information recorded above is complete and accurate, and that intentional falsification of these claims may subject me to civil or criminal penalties under the laws and regulations of the United States, including the Uniform Code of Military Justice where applicable.

Date	Applicant Signature
Date	Environmental Office Signature
Date	Commander Signature

In accordance with the Lacey Act (16 U.S.C. §§ 3371-3378, this permit must be affixed to any shipment containing above items. For hand-carried items, this permit (original or copy) must be ready to be shown to military, customs, and/or US Fish and Wildlife Service authorities at the port of entry.

Wilkes Island Entry Authorization Form

Name of entrant. (Last, First, M.I.)
Intention of visit to the Wilkes Island Marine Bird Reserve. (be specific)
Intended Date / Dates of Visit: (Month, Day, Year and time if required and plan able)

Base Operations Signature	Date
Environmental Office Signature	Date

The Following Restrictions Apply:

You must Contact Base Ops Daily Before Proceeding to the Marine Bird Reserve.

You must obtain and maintain a hand held radio and learn basic radio procedures before you proceed.

You must maintain a 20' distance from marine bird wildlife within the reserve without an Environmental Office escort or written permission.

You must return the gate to its closed position after entry and exit.

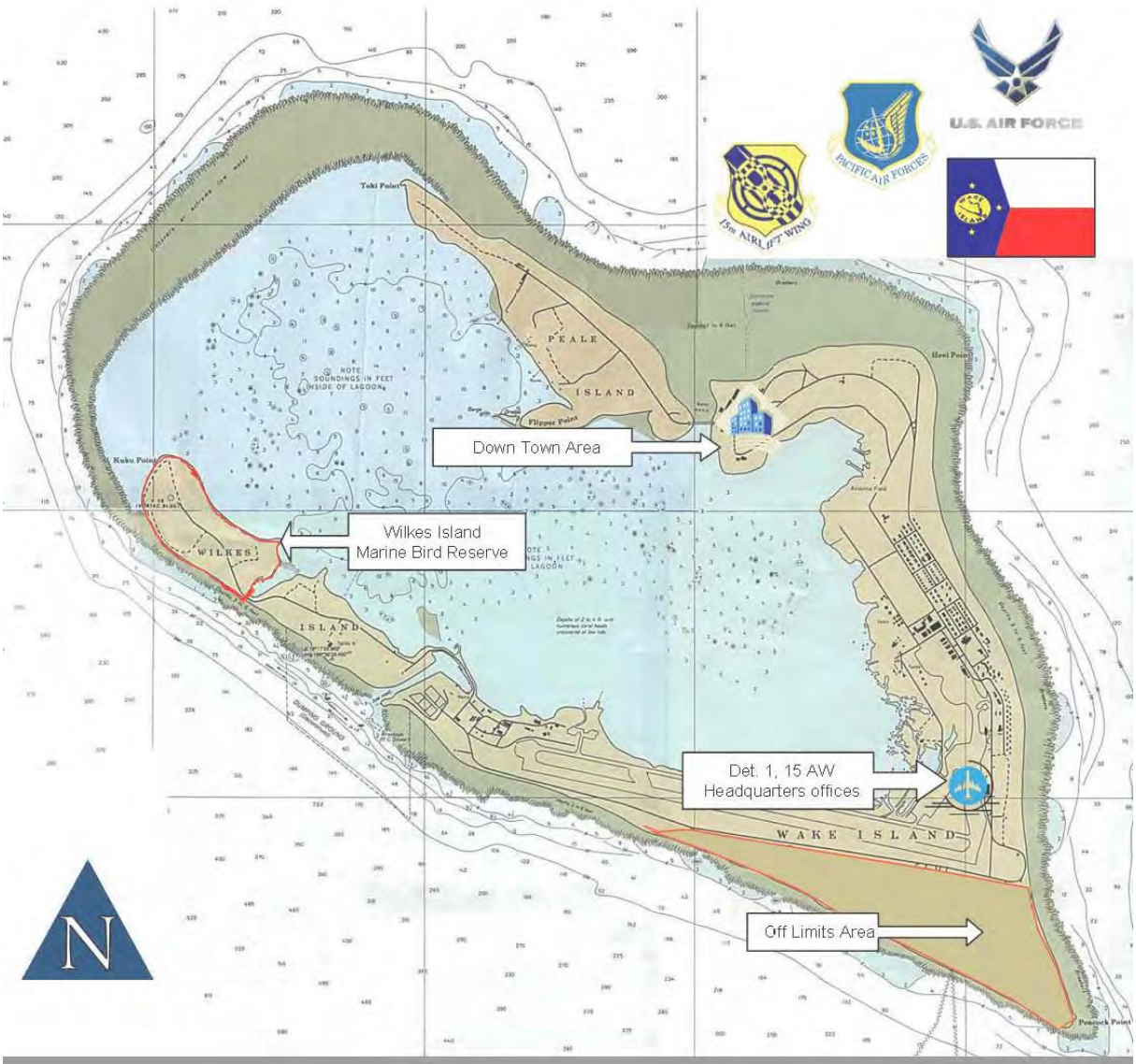
You may only transport on foot, no vehicular traffic is allowed. (exceptions may be made for area maintenance at the Commanders or Environmental offices request)

You may only approach the reserve from the gate, not the shoreline or any other point.

Visitor Signature	Date

WI Form 32-7002 Previous Versions are Obsolete 25 April 2006

WI



The Wake Island Atoll Marine Bird Reserve

This reserve is denoted by chain gate to the far north west entry point to Wilkes Island.

Entry to this area is authorized by the Commander or the Project Manager in writing.

DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE

3-201
(1/97)

FEDERAL FISH AND WILDLIFE PERMIT

2. AUTHORITY-STATUTES
16 USD 703-712

REGULATIONS (Attached)
50 CFR Part 13
50 CFR 21.41

1. PERMITTEE

U.S. AIR FORCE
WAKE ISLAND AIRFIELD
TRAVIS PEARSON, ENVIRONMENTAL OFFICE
1502 WAKE AVE, STE 122
WAKE ISLAND, HI 96898
U.S.A.

3. NUMBER
MB077566-0

4. RENEWABLE
☒ YES
☐ NO

5. MAY COPY
☒ YES
☐ NO

6. EFFECTIVE
09/01/2005

7. EXPIRES
08/31/2006

8. NAME AND TITLE OF PRINCIPAL OFFICER (If NT is a business)
BRADLEY D. WATERS, MAJ
BASE COMMANDER, WAKE ISLAND AIRFIELD

9. TYPE OF PERMIT
DEPREDATION - AIRPORT

10. LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED
ON OR NEAR RUNWAYS OR AREAS WHERE AIRCRAFT COULD BE IN DANGER OF BIRD STRIKE
RECORDS MAINTAINED IN SAFETY OFFICE OF WAKE ISLAND AIRFIELD
WAKE ISLAND, HAWAII

11. CONDITIONS AND AUTHORIZATIONS:

A. GENERAL CONDITIONS SET OUT IN SUBPART D OF 50 CFR 13, AND SPECIFIC CONDITIONS CONTAINED IN FEDERAL REGULATIONS CITED IN BLOCK #2 ABOVE, ARE HEREBY MADE A PART OF THIS PERMIT. ALL ACTIVITIES AUTHORIZED HEREIN MUST BE CARRIED OUT IN ACCORD WITH AND FOR THE PURPOSES DESCRIBED IN THE APPLICATION SUBMITTED. CONTINUED VALIDITY, OR RENEWAL, OF THIS PERMIT IS SUBJECT TO COMPLETE AND TIMELY COMPLIANCE WITH ALL APPLICABLE CONDITIONS, INCLUDING THE FILING OF ALL REQUIRED INFORMATION AND REPORTS.

B. THE VALIDITY OF THIS PERMIT IS ALSO CONDITIONED UPON STRICT OBSERVANCE OF ALL APPLICABLE FOREIGN, STATE, LOCAL OR OTHER FEDERAL LAW.

C. VALID FOR USE BY PERMITTEE NAMED ABOVE.

D. You are authorized to take, temporarily possess, and transport migratory birds (primarily terns) to relieve or prevent injurious situations impacting public safety. All take must be done as part of an integrated wildlife damage management program that emphasizes nonlethal management techniques. You may not use this authority for situations in which migratory birds are merely causing a nuisance. This excludes bald eagles, golden eagles, and threatened/endangered species.

E. You are authorized in emergency situations only to take, trap, or relocate any migratory birds, nests and eggs (except bald eagles, golden eagles, or endangered or threatened species), when the migratory birds, nests, or eggs are posing a direct threat to human safety. A direct threat to human safety is one which involves a threat of serious bodily injury or a risk to human life.

F. You are authorized to salvage and temporarily possess migratory birds found dead or taken under this permit for (1) disposal, (2) transfer to the U.S. Department of Agriculture, (3) diagnostic purposes, (4) purposes of training airport personnel, (5) donation to a public charity (those suitable for human consumption), or (6) donation to a public scientific or educational institution as defined in 50 CFR 10.12. Any dead bald eagles or golden eagles salvaged must be reported within 48 hours to the National Eagle Repository at (303) 287-2110 and to the issuing migratory bird permit issuing office at (503) 872-2715. The Repository will provide directions for shipment of these specimens.

☒ ADDITIONAL CONDITIONS AND AUTHORIZATIONS ALSO APPLY

12. REPORTING REQUIREMENTS
ANNUAL REPORT DUE: 9/10
1/31

ISSUED BY
Pamela E. Tate-Stall

TITLE
PERMIT ADMINISTRATOR - FWS REGION 1

DATE
07/29/2005

G. You may not salvage and must immediately report to U.S. Fish and Wildlife Service Law Enforcement any migratory birds that appear to have been poisoned, shot, or otherwise injured as the result of criminal activity.

H. You may use the following methods of take: (1) firearms; (2) nets; (3) registered animal drugs (excluding nicarbazin), pesticides and repellents; (4) falconry abatement; and (5) legal lethal and live traps (excluding pole traps). Birds caught live may be euthanized or transported and relocated to another site approved by the appropriate State wildlife agency, if required. When using firearms, you may use rifles or air rifles to shoot any bird when you determine that the use of a shotgun is inadequate to resolve the injurious situation. The use of any of the above techniques is at your discretion for each situation.

I. You may temporarily possess and stabilize sick and injured migratory birds and immediately transport them to a federally licensed rehabilitator for care.

J. The following subpermittees are authorized - Kevin Nichols, Travis Pearson. In addition, any other person who is (1) employed by or under contract to you for the activities specified in this permit, or (2) otherwise designated a subpermittee by you in writing, may exercise the authority of this permit.

K. You and any subpermittee(s) must comply with the attached Standard Conditions for Migratory Bird Depredation Permits

For suspected illegal activity, immediately contact USFWS Law Enforcement at: 808-861-8525 (Honolulul).

Migratory Bird Permit Office
911 N.E. 11th Avenue
Portland, OR 97232-4181
503-872-2715 Fax: 503-231-2019
tami_tatehall@fws.gov

Standard Conditions
Migratory Bird Depredation Permits
50 CFR 21.41

All of the provisions and conditions of the governing regulations at 50 CFR part 13 and 50 CFR part 21.41 are conditions of your permit. The standard conditions below are additional provisions and conditions of your permit. Failure to comply with the conditions of your permit could be cause for suspension of the permit. If you have questions regarding these conditions, refer to the regulations or, if necessary, contact your migratory bird permit issuing office. For copies of the regulations and forms, or to obtain contact information for your issuing office, visit: www.fws.gov/permits/mbpermits/birdbasics.html.

1. To minimize the lethal take of migratory birds, you are required to continually apply non-lethal methods of harassment in conjunction with lethal control.

2. Shotguns used to take migratory birds can be no larger than 10-gauge and must be fired from the shoulder. You must use nontoxic shot listed in 50 CFR 20.21(j).

3. You may not use blinds, pits, or other means of concealment, decoys, duck calls, or other devices to lure or entice migratory birds into gun range.

4. You are not authorized to take, capture, harass, or disturb bald eagles or golden eagles, or species listed as threatened or endangered under the Endangered Species Act found in 50 CFR 17, without additional authorization.

   For a list of threatened and endangered species in your state, visit the U.S. Fish and Wildlife Service's Threatened and Endangered Species System (TESS) at: www.fws.gov/endangered.

5. If you encounter a migratory bird with a Federal band issued by the U.S. Geological Survey Bird Banding Laboratory, Laurel, MD, report the band number to 1-800-327-BAND or www.reportband.gov.

6. This permit does not authorize take or release of any migratory birds, nests, or eggs on Federal lands without additional prior written authorization from the applicable Federal agency.

7. This permit does not authorize take or release of any migratory birds, nests, or eggs on State lands or other public or private property without prior written permission or permits from the landowner or custodian.

8. Unless otherwise specified on the face of the permit, migratory birds, nests, or eggs taken under this permit must be:
   (a) turned over to the U.S. Department of Agriculture for official purposes,
   (b) donated to a public educational or scientific institution as defined by 50 CFR 10, or
   (c) completely destroyed by burial or incineration.

9. Subpermittees must be at least 18 years of age. As the permittee, you are legally responsible for ensuring that your subpermittees are adequately trained and adhere to the terms of your permit. You are responsible for maintaining current records of who you have designated as a subpermittee, including copies of letters you have provided.

10. You and any subpermittees must carry a legible copy of this permit and display it upon request whenever you are exercising its authority.

(page 1 of 2)

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Appendix G: EFH Impacts Provisions

The EFH provisions of the Magnuson Stevens Act impose procedural requirements on both Councils and federal agencies related to marine planning. First, for each FMP, Councils must identify adverse impacts to EFH resulting from both fishing and non-fishing activities, and describe measures to minimize these impacts. Second, the provisions allow Councils to provide comments and make recommendations to federal or state agencies that propose actions that may affect the habitat, including EFH, of a managed species. NMFS is required to consult with federal agencies on actions that may adversely affect EFH, which usually occurs concurrently with the NEPA planning process.

None of the fisheries operating under the Hawaii Archipelago FEP are expected to have adverse impacts on EFH or HAPC for species managed under the different fisheries. Continued and future operations of fisheries under the Hawaii Archipelago FEP 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.

1. MSA and non-MSA fishing activities that may adversely affect EFH

The Council is required to act to prevent, mitigate, or minimize adverse effects from fishing on evidence that a fishing practice has identifiable adverse effects on EFH for any MUS covered by an FMP. Adverse fishing impacts may include physical, chemical, or biological alterations of the substrate and loss of, or injury to, benthic organisms, prey species, and their habitat or other components of the ecosystem.

The predominant fishing gear types—hook and line, longline, troll, traps—used in the fisheries managed by the Council cause few fishing-related impacts to the benthic habitat utilized by coral reef species, bottomfish, crustaceans, or precious corals. The current management regime prohibits the use of bottom trawls, bottom-set nets, explosives, and poisons. The use of non-selective gear to harvest precious corals is prohibited and only selective and non-destructive gear may be allowed to fish for Coral Reef Ecosystem MUS. Although lobster traps have a potential impact on the benthic habitat, the tropical lobster *Panulirus penicillatus* does not enter lobster traps. In the limited areas where harvesting does occur in the Hawaii Archipelago, lobsters are caught by hand. This technique causes limited damage or no fishing-related impacts to the benthic habitat, and its continued use is likely.

The Council has determined that current management measures to protect fishery habitat are adequate and that no additional measures are necessary at this time. However, the Council has identified the following potential sources of fishery-related impacts to benthic habitat that may occur during normal fishing operations:

- Anchor damage from vessels attempting to maintain position over productive fishing habitat.
- Heavy weights and line entanglement occurring during normal hook-and-line fishing operations.
- Lost gear from lobster fishing operations.

- Remotely operated vehicle (ROV) tether damage to precious coral during harvesting operations.

Trash and discarded and lost gear (leaders, hooks, weights) by fishing vessels operating in the EEZ, are a Council concern. A report on the first phase of a submersible-supported research project conducted in Hawaii in 2001 preliminarily determined that bottomfish gear exhibited minimal to no impact on the coral reef habitat (C. Kelley, personal communication). A November 2001 cruise in the Main Hawaiian Islands determined that precious corals harvesting has "negligible" impact on the habitat (R. Grigg, personal communication). The Council is concerned with habitat impacts of marine debris originating from fishing operations outside the Western Pacific Region. NMFS is currently investigating the source and impacts of this debris. International cooperation will be necessary to find solutions to this broader problem.
Because the habitat of pelagic species is the open ocean, and managed fisheries employ variants of hook-and-line gear, there are no direct impacts to EFH. Lost gear may be a hazard to some species due to entanglement, but it has no direct effect on habitat. A possible impact would be caused by fisheries that target and deplete key prey species, but currently there is no such fishery. There is also a concern that invasive marine and terrestrial species may be introduced into sensitive environments by fishing vessels transiting from populated islands and grounding on shallow reef areas. Of most concern is the potential for unintentional introduction of rats (*Rattus* spp.) to the remote islands in the NWHI and PRIA that harbor endemic land birds. Although there are no restrictions that prohibit fishing vessels from transiting near these remote island areas, no invasive species introductions due to this activity have been documented. However, the Council is concerned that this could occur as fisheries expand and emerging fisheries develop in the future.

While the Council has determined that current management measures to protect fishery habitat are adequate, should future research demonstrate a need, the Council will act accordingly to protect habitat necessary to maintain a sustainable and productive fishery in the Western Pacific Region.

In modern times, some reefs have been degraded by a range of human activities. Comprehensive lists of human threats to coral reefs in the U.S. Pacific Islands are provided by Maragos et al. (1996), Birkeland (1997a), Grigg 2002, and Clark and Gulko (1999). (These findings are summarized in Table 27.) More recently, the U.S. Coral Reef Task Force identified six key threats to coral reefs: (1) landbased sources of pollutions, (2) overfishing, (3) recreational overuse, (4) lack of awarness, (5) climate change, and (6) coral bleaching and disease. In general, reefs closest to human population centers are more heavily used and are in worse condition than those in remote locations (Green 1997). Nonetheless, it is difficult to generalize about the present condition of coral reefs in the U.S. Pacific Islands because of their broad geographic distribution and the lack of long-term monitoring to document environmental and biological baselines. Coral reef conditions and use patterns vary throughout the U.S. Pacific Islands.
A useful distinction is between coral reefs near inhabited islands of American Samoa, CNMI, Guam, and the main Hawaiian islands and coral reefs in the remote NWHI, PRIAs, and northern islands of the CNMI. Reefs near the inhabited islands are heavily used for small-scale artisanal, recreational, and subsistence fisheries, and those in Hawaii, CNMI and Guam are also the focus for extensive non-consumptive marine recreation. Rather than a relatively few large-scale mechanized operations, many fishermen each deploy more limited gear. The more accessible

banks in the main Hawaiian Islands (Penguin Bank, Kaula Rock), Guam (southern banks), and the CNMI (Esmeralda Bank, 300 Reef, Marpi Reef, Dump Coke and Malakis Reef are the most heavily fished offshore reefs in the Western Pacific Region management area.
The vast majority of the reefs in the Western Pacific Region are remote and, in some areas, they have protected status. Most of these are believed to be in good condition. Existing fisheries are limited. The major exception is in the NWHI, where there are commercial fisheries for spiny lobster and deep-slope bottomfish (Green 1997). Poaching by foreign fishing fleets is suspected at Guam's southern banks, in the PRIA, and possibly in other areas. Poachers usually target high-value and often rare or overfished coral reef resources. These activities are already illegal but difficult to detect.

2. Non-fishing related activities that may adversely affect EFH

On the basis of the guidelines established by the Secretary under Section 305 (b)(1)(A) of the MSA, NMFS has developed a set of guidelines to assist councils meet the requirement to describe adverse impacts to EFH from non-fishing activities in their FMPs (67 FR 2376). A wide range of non-fishing activities throughout the U.S. Pacific Islands contribute to EFH degradation. FEP implementation will not directly mitigate these activities. However, as already noted, it will allow NMFS and the Council to make recommendations to any federal or state agency about actions that may impact EFH. Not only could this be a mechanism to minimize the environmental impacts of agency action, it will help them focus their conservation and management efforts.

The Council is required to identify non-fishing activities that have the potential to adversely affect EFH quality and, for each activity, describe its known potential adverse impacts and the EFH most likely to be adversely affected. The descriptions should explain the mechanisms or processes that may cause the adverse effects and how these may affect habitat function. The Council considered a wide range of non-fishing activities that may threaten important properties of the habitat used by managed species and their prey, including dredging, dredge material disposal, mineral exploration, water diversion, aquaculture, wastewater discharge, oil and hazardous substance discharge, construction of fish enhancement structures, coastal development, introduction of exotic species, and agricultural practices. These activities and impacts, along with mitigation measures, are detailed in the next section.

Table 1: Threats to Coral Reefs in the Hawaiian Archipelago

Activity	**MHI**	**NWHI**
Coastal construction	x	
Destructive fishing	x	
Flooding	x	
Industrial pollution		
Overuse/over harvesting	x	
Nutrient loading (sewage/eutrophication)	x	
Soil erosion/sedimentation	x	

Vessel groundings/oil spills		x
Military activity	x	x
Hazardous waste		x
Tourist impacts	x	
Urbanization	x	
Thermal pollution	x	
Marine debris	x	x
Introduced species	x	

Sources: Birkeland 1997a; Clark and Gulko 1999; Grigg 2002; Jokiel 1999; Maragos et al. 1996

3. Cumulative Impacts Assessment

A cumulative impacts analysis (CIA) is required by the NMFS EFH Final Rule (2002) to the extent feasible and practicable. The CIA "should analyze how the cumulative impacts of fishing and non-fishing activities influence the function of EFH on an ecosystem or watershed scale" (67 FR 2378, January 17, 2002). The assessment should include multiple threats, including natural stresses.

There are a variety of past, present, and future activities that have the potential to affect EFH in the Hawaiian Archipelago. In the Main Hawaiian Islands, there has been interest in aquaculture, inter-island electricity cables, and offshore energy development as the state moves toward self-sufficiency in energy and food production. Since many water column impacts are temporary in nature, benthic alteration associated with laying cables and anchoring are most likely to have an adverse impact and pose the greatest threat to EFH for juvenile and adult life stages. Nearshore impacts associated with development have the potential to impact shallow water species. Large-scale impacts such as global climate change that affect ocean temperatures, currents, and potentially food chain dynamics are most likely to threaten EFH for egg and larval pelagic stages.

The Northwestern Hawaiian Islands are very remote. All commercial fishing for bottomfish and seamount groundfish species is under moratorium in the Hancock Seamount Ecosystem Management Area; commercial fishing is banned within the Papahānaumokuākea Marine National Monument. Activity within the Monument is generally limited to scientific research. Similar to larval and egg life stages, global environmental problems pose the largest threat to EFH in the NWHI.

Future analyses will seek to analyze cumulative impact of habitat conversion and the impacts of discharges in order to evaluate the cumulative impacts on EFH. Information and techniques that are developed for this process will be used to supplement future revisions of these EFH provisions as the information becomes available.

4. Conservation and Enhancement Recommendations

According to NMFS guidelines, Councils should describe ways to avoid, minimize, or compensate for the adverse effects to EFH and promote the conservation and enhancement of EFH. Generally, non-water dependent actions that may have adverse impacts should not be located in EFH. Activities that may result in significant adverse effects on EFH should be avoided where less environmentally harmful alternatives are available. If there are no alternatives, the impacts of these actions should be minimized. Environmentally sound engineering and management practices should be employed for all actions that may adversely affect EFH. Disposal or spillage of any material (dredge material, sludge, industrial waste, or other potentially harmful materials) that would destroy or degrade EFH should be avoided. If avoidance or minimization is not possible, or will not adequately protect EFH, compensatory mitigation to conserve and enhance EFH should be recommended. FEPs may recommend proactive measures to conserve or enhance EFH. When developing proactive measures, Councils may develop a priority ranking of the recommendations to assist federal and state agencies undertaking such measures. Councils should describe a variety of options to conserve or enhance EFH, which may include, but are not limited to the following:

Enhancement of rivers, streams, and coastal areas through new federal, state, or local government planning efforts to restore river, stream, or coastal area watersheds.

Improve water quality and quantity through the use of the best land management practices to ensure that water-quality standards at state and federal levels are met. The practices include improved sewage treatment, disposing of waste materials properly, and maintaining sufficient in-stream flow to prevent adverse effects to estuarine areas.

Restore or create habitat, or convert non-EFH to EFH, to replace lost or degraded EFH, if conditions merit such activities. However, habitat conversion at the expense of other naturally functioning systems must be justified within an ecosystem context.
Established policies and procedures of the Council and NMFS provide the framework for conserving and enhancing EFH. Components of this framework include adverse impact avoidance and minimization, provision of compensatory mitigation whenever the impact is significant and unavoidable, and incorporation of enhancement. New and expanded responsibilities contained in the MSA will be met through appropriate application of these policies and principles. In assessing the potential impacts of proposed projects, the Council and the NMFS are guided by the following general considerations:

- The extent to which the activity would directly and indirectly affect the occurrence, abundance, health, and continued existence of fishery resources.
- The extent to which the potential for cumulative impacts exists.
- The extent to which adverse impacts can be avoided through project modification, alternative site selection, or other safeguards.
- The extent to which the activity is water dependent if loss or degradation of EFH is involved.
- The extent to which mitigation may be used to offset unavoidable loss of habitat functions and values.

Seven non-fishing activities have been identified that directly or indirectly affect habitat used by MUS. Impacts and conservation measures are summarized below for each of these activities.

Although not all inclusive, what follows is a good example of the kinds of measures that can help to minimize or avoid the adverse effects of identified non-fishing activities on EFH.

- Habitat Loss and Degradation

Impacts:

- Changes in abundance of infaunal and bottom-dwelling organisms
- Turbidity plumes
- Biological availability of toxic substances
- Damage to sensitive habitats
- Current patterns/water circulation modification
- Loss of habitat function
- Contaminant runoff
- Sediment runoff
- Shoreline stabilization projects

Conservation Measures:

1. To the extent possible, fill materials resulting from dredging operations should be placed on an upland site. Fills should not be allowed in areas with subaquatic vegetation, coral reefs, or other areas of high productivity.
2. The cumulative impacts of past and current fill operations on EFH should be addressed by federal, state, and local resource management and permitting agencies and should considered in the permitting process.
3. The disposal of contaminated dredge material should not be allowed in EFH.
4. When reviewing open-water disposal permits for dredged material, state and federal agencies should identify the direct and indirect impacts such projects may have on EFH. When practicable, benthic productivity should be determined by sampling prior to any discharge of fill material. Sampling design should be developed with input from state and federal resource agencies.
5. The areal extent of the disposal site should be minimized. However, in some cases, thin layer disposal may be less deleterious. All non-avoidable impacts should be mitigated.
6. All spoil disposal permits should reference latitude–longitude coordinates of the site so that information can be incorporated into GIS systems. Inclusion of aerial photos may also be required to help geo-reference the site and evaluate impacts over time.
7. Further fills in estuaries and bays for development of commercial enterprises should be curtailed.
8. Prior to installation of any piers or docks, the presence or absence of coral reefs and submerged aquatic vegetation should be determined. These areas should be avoided. Benthic productivity should also be determined, and areas with high productivity avoided. Sampling design should be developed with input from state and federal resource agencies.
9. The use of dry stack storage is preferable to wet mooring of boats. If that method is not feasible, construction of piers, docks, and marinas should be designed to minimize impacts to the coral reef substrate and subaquatic vegetation.
10. Bioengineering should be used to protect altered shorelines. The alteration of natural, stable shorelines should be avoided.

- Pollution and Contamination

Impacts:

- Introduction of chemicals
- Introduction of animal wastes
- Increased sedimentation
- Wastewater effluent with high contaminant levels
- High nutrient levels downcurrent of outfalls
- Biocides to prevent biofouling
- Thermal effects
- Turbidity plumes
- Affected submerged aquatic vegetation sites
- Stormwater runoff
- Direct physical contact
- Indirect exposure
- Cleanup

Conservation Measures:

1. Outfall structures should be placed sufficiently far offshore to prevent discharge water from affecting areas designated as EFH. Discharges should be treated using the best available technology, including implementation of up-to-date methodologies for reducing discharges of biocides (e.g., chlorine) and other toxic substances.
2. Benthic productivity should be determined by sampling prior to any construction activity. Areas of high productivity should be avoided to the maximum extent possible. Sampling design should be developed with input from state and federal resource agencies.
3. Mitigation should be provided for the degradation or loss of habitat from placement of the outfall structure and pipeline as well as the treated water plume.
4. Containment equipment and sufficient supplies to combat spills should be on-site at all facilities that handle oil or hazardous substances.
5. Each facility should have a Spill Contingency Plan, and all employees should be trained in how to respond to a spill.
6. To the maximum extent practicable, storage of oil and hazardous substances should be located in an area that would prevent spills from reaching the aquatic environment.
7. Construction of roads and facilities adjacent to aquatic environments should include a storm-water treatment component that would filter out oils and other petroleum products.
8. The use of pesticides, herbicides, and fertilizers in areas that would allow for their entry into the aquatic environment should be avoided.
9. The best land management practices should be used to control topsoil erosion and sedimentation.

- Dredging

Impacts:

- Changes in abundance of infaunal and bottom-dwelling organisms
- Turbidity plumes
- Bioavailability of toxic substances

- Damage to sensitive habitats
- Water circulation modification

Conservation Measures:

1. To the maximum extent practicable, dredging should be avoided. Activities that require dredging (such as placement of piers, docks, marinas, etc.) should be sited in deep-water areas or designed in such a way as to alleviate the need for maintenance dredging. Projects should be permitted only for water-dependent purposes, when no feasible alternatives are available.
2. Dredging in coastal and estuarine waters should be performed during the time frame when MUS and prey species are least likely to be entrained. Dredging should be avoided in areas with submerged aquatic vegetation and coral reefs.
3. All dredging permits should reference latitude–longitude coordinates of the site so that information can be incorporated into Geographic Information Systems (GIS). Inclusion of aerial photos may also be required to help geo-reference the site and evaluate impacts over time.
4. Sediments should be tested for contaminants as per the EPA and U.S. Army Corps of Engineers requirements.
5. The cumulative impacts of past and current dredging operations on EFH should be addressed by federal, state, and local resource management and permitting agencies and should be considered in the permitting process.
6. If dredging needs are caused by excessive sedimentation in the watershed, those causes should be identified and appropriate management agencies contacted to assure action is done to curtail those causes.
7. Pipelines and accessory equipment used in conjunction with dredging operations should, to the maximum extent possible, avoid coral reefs, seagrass beds, estuarine habitats, and areas of subaquatic vegetation.

o Marine Mining

Impacts:

- Loss of habitat function
- Turbidity plumes
- Resuspension of fine-grained mineral particles
- Composition of the substrate altered

Conservation Measures:

1. Mining in areas identified as a coral reef ecosystem should be avoided.
2. Mining in areas of high biological productivity should be avoided.
3. Mitigation should be provided for loss of habitat due to mining.

o Water Intake Structures

Impacts:

- Entrapment, impingement, and entrainment
- Loss of prey species

Conservation Measures:

1. New facilities that rely on surface waters for cooling should not be located in areas where coral reef organisms are concentrated. Discharge points should be located in areas that have low concentrations of living marine resources, or they should incorporate cooling towers that employ sufficient safeguards to ensure against release of blow-down pollutants into the aquatic environment.
2. Intake structures should be designed to prevent entrainment or impingement of MUS larvae and eggs.
3. Discharge temperatures (both heated and cooled effluent) should not exceed the thermal tolerance of the plant and animal species in the receiving body of water.
4. Mitigation should be provided for the loss of EFH from placement of the intake structure and delivery pipeline.

- Aquaculture Facilities

Impacts:

- Discharge of organic waste from the farms
- Impacts to the seafloor below the cages or pens

Conservation Measures:

1. Facilities should be located in upland areas as often as possible. Tidally influenced wetlands should not be enclosed or impounded for mariculture purposes. This includes hatchery and grow-out operations. Siting of facilities should also take into account the size of the facility, the presence or absence of submerged aquatic vegetation and coral reef ecosystems, proximity of wild fish stocks, migratory patterns, competing uses, hydrographic conditions, and upstream uses. Benthic productivity should be determined by sampling prior to any operations. Areas of high productivity should be avoided to the maximum extent possible. Sampling design should be developed with input from state and federal resource agencies.
2. To the extent practicable, water intakes should be designed to avoid entrainment and impingement of native fauna.
3. Water discharge should be treated to avoid contamination of the receiving water and should be located only in areas having good mixing characteristics.
4. Where cage mariculture operations are undertaken, water depths and circulation patterns should be investigated and should be adequate to preclude the buildup of waste products, excess feed, and chemical agents.
5. Non-native, ecologically undesirable species that are reared may pose a risk of escape or accidental release, which could adversely affect the ecological balance of an area. A thorough scientific review and risk assessment should be undertaken before any non-native species are allowed to be introduced.
6. Any net pen structure should have small enough webbing to prevent entanglement by prey species.
7. Mitigation should be provided for the EFH areas impacted by the facility.

- Introduction of Exotic Species

Impacts:

- Habitat alteration
- Trophic alteration

- Gene pool alteration
- Spatial alteration
- Introduction of disease

Conservation Measures:

1. Vessels should discharge ballast water far enough out to sea to prevent introduction of nonnative species to bays and estuaries.
2. Vessels should conduct routine inspections for presence of exotic species in crew quarters and hull of the vessel prior to embarking to remote islands (PRIAs, NWHI, and northern islands of the CNMI).
3. Exotic species should not be introduced for aquaculture purposes unless a thorough scientific evaluation and risk assessment are performed (see section on aquaculture).
4. Effluent from public aquaria display laboratories and educational institutes using exotic species should be treated prior to discharge.

5. Essential Fish Habitat Research Needs

The Council conducted an initial inventory of available environmental and fisheries data sources relevant to the EFH of each managed fishery. Based on this inventory, a series of tables were created that indicated the existing level of data for individual MUS in each fishery. These tables are available in Supplements to Amendment 4, 6, and 10 to the Precious Corals, Bottomfish and Seamount Groundfish, and Crustaceans FMPs respectively (WPRFMC 2002), and the Coral Reef Ecosystems FMP (WPRFMC 2001) and are summarized below.

Additional research is needed to make available sufficient information to support a higher level of description and identification of EFH and HAPC. Additional research may also be necessary to identify and evaluate actual and potential adverse effects on EFH, including, but not limited to, direct physical alteration; impaired habitat quality/functions; cumulative impacts from fishing; or indirect adverse effects, such as sea level rise, climate change, and climate shifts. The following scientific data are needed to more effectively address EFH provisions:

All Species

- Distribution of early life history stages (eggs and larvae) of MUS by habitat
- Juvenile habitat (including physical, chemical, and biological features that determine suitable juvenile habitat)
- Food habits (feeding depth, major prey species, etc.)
- Habitat-related densities for all MUS life history stages
- Habitat utilization patterns for different life history stages and species for BMUS
- Growth, reproduction, and survival rates for MUS within habitats

Bottomfish Species

- Inventory of marine habitats in the EEZ of the Western Pacific Region
- Data to obtain a better SPR estimate for American Samoa's bottomfish complex
- Baseline (virgin stock) parameters (CPUE, percent immature) for the Guam/NMI deep- and shallow-water bottomfish complexes
- High-resolution maps of bottom topography/currents/water masses/primary productivity

Crustaceans Species

- Identification of postlarval settlement habitat of all CMUS
- Identification of source–sink relationships in the NWHI and other regions (i.e., relationships between spawning sites settlement using circulation models, and genetic techniques)
- Establish baseline parameters (CPUE) for the Guam/Northern Marinas crustacean populations
- Research to determine habitat related densities for all CMUS life history stages in American Samoa, Guam, Hawaii, and NMI
- High-resolution mapping of bottom topography, bathymetry, currents, substrate types, algal beds, and habitat relief

Precious Corals Species

- Distribution, abundance, and status of precious corals in the Western Pacific Region

Coral Reef Ecosystem Species

- The distribution of early life history stages (eggs and larvae) of MUS by habitat
- Description of juvenile habitat (including physical, chemical, and biological features that determine suitable juvenile habitat)
- Food habits (feeding depth, major prey species, etc.)
- Habitat-related densities for all MUS life history stages
- Habitat utilization patterns for different life history stages and species
- Growth, reproduction, and survival rates for MUS within habitats.
- Inventory of coral reef ecosystem habitats in the EEZ of the Western Pacific Region
- Location of important spawning sites
- Identification of postlarval settlement habitat
- Establishment of baseline parameters for coral reef ecosystem resources
- High-resolution mapping of bottom topography, bathymetry, currents, substrate types, algal beds, and habitat relief

NMFS guidelines suggest that the Council and NMFS periodically review and update the EFH components of FMPs as new data become available. The Council recommends that new information be reviewed, as necessary, during preparation of the annual and SAFE reports by the Plan Teams, in accordance with the National Standards guidelines. EFH designations may be changed under the FEP amendment process if information presented in an annual review indicates that modifications are justified.

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Appendix H: Essential Fish Habitat and Habitat Areas of Particular Concern Maps

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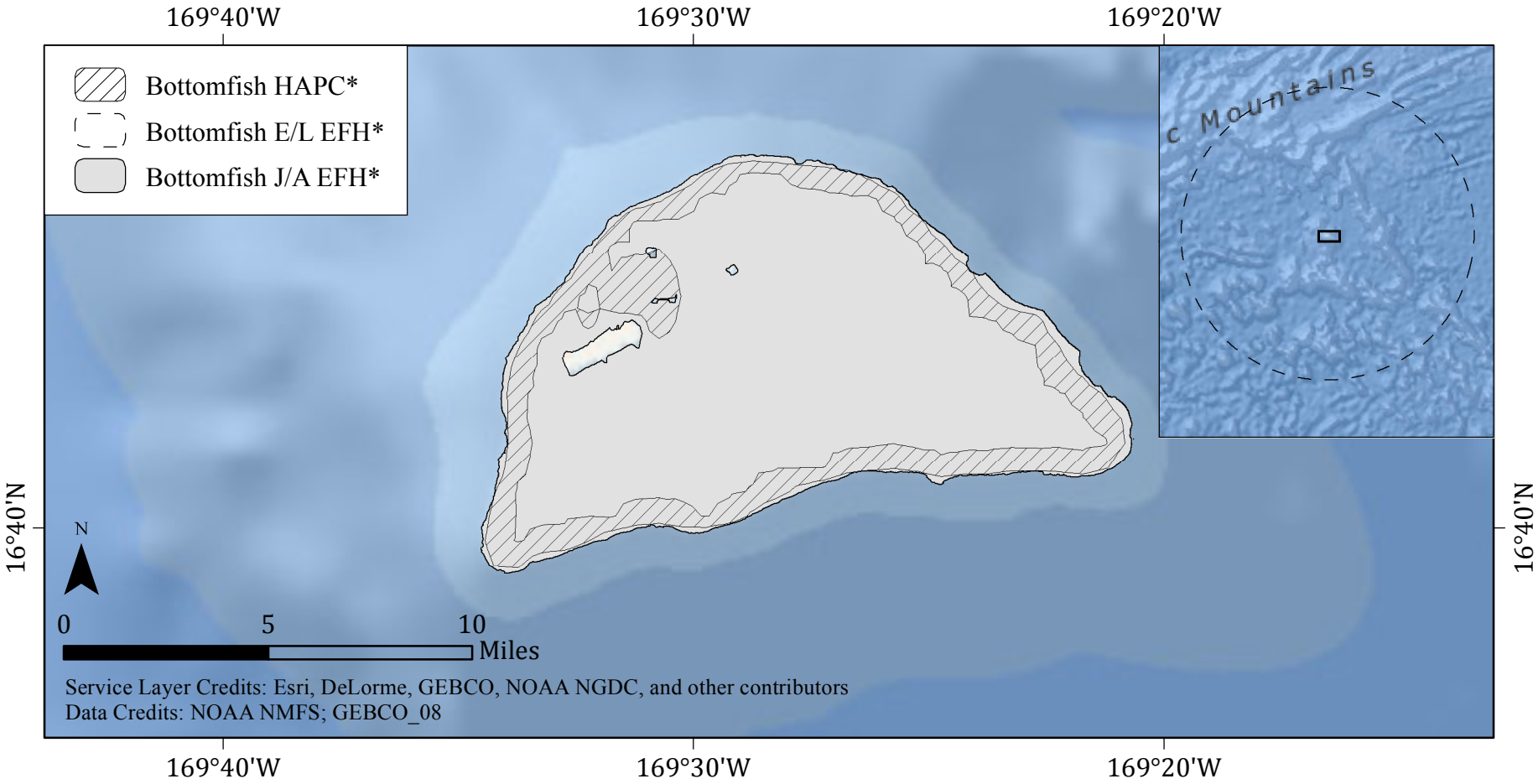
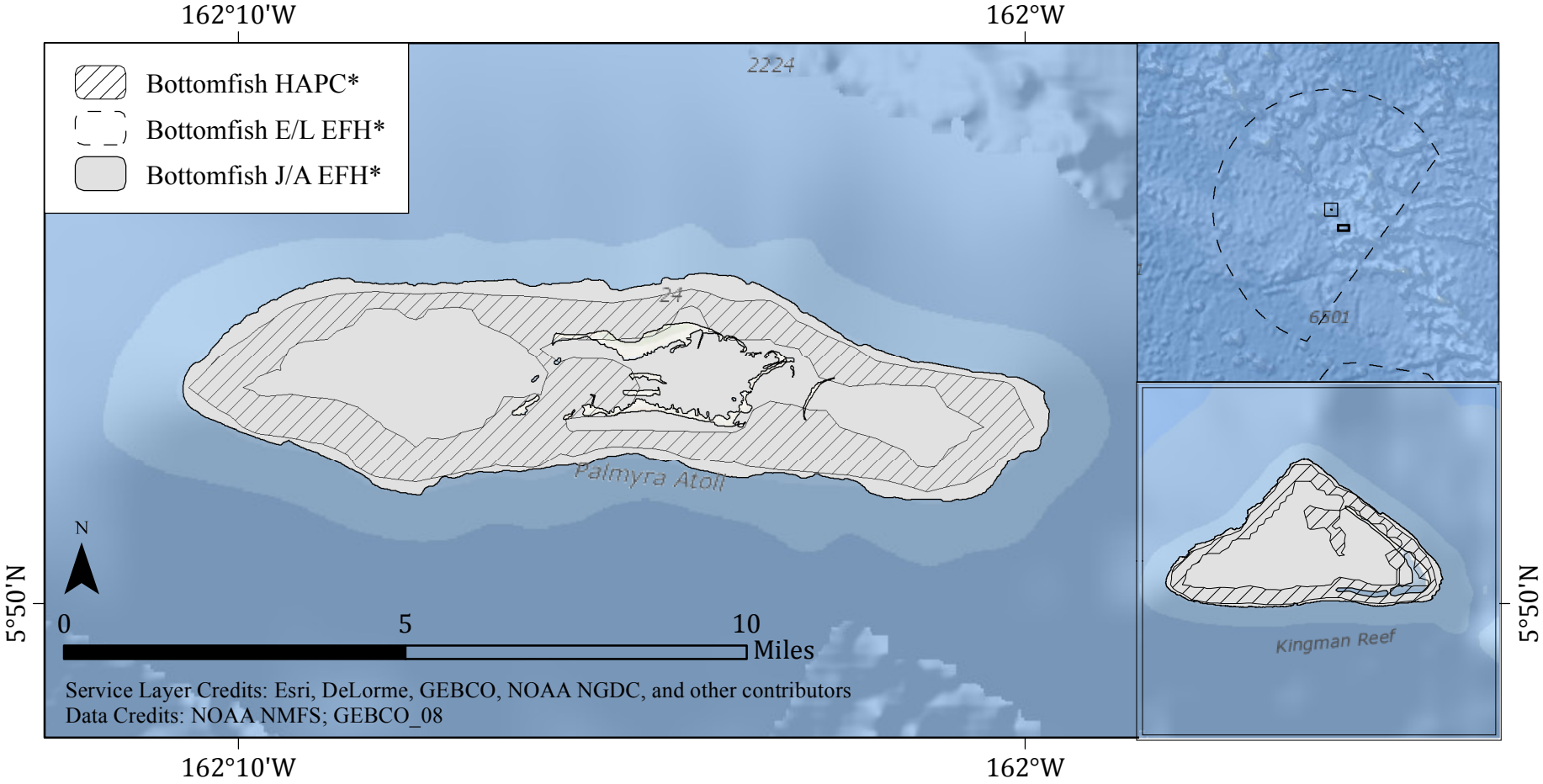
Pacific Remote Island Area Fishery Ecosystem Plan
Bottomfish EFH/HAPC: Johnston Atoll



**The geographic extent of EFH and HAPC are shown. EFH for eggs and larvae (E/L) is the water column to a depth of 400 m from the shoreline to the outer boundary of the EEZ, while juvenile/adult (J/A) EFH is the water column and all bottom habitat to a depth of 400 m to the extent shown. HAPC is all escarpments/slopes between 40–280 meters to the extent shown.*

Pacific Remote Island Area Fishery Ecosystem Plan
Bottomfish EFH/HAPC: Palmyra Atoll and Kingman Reef



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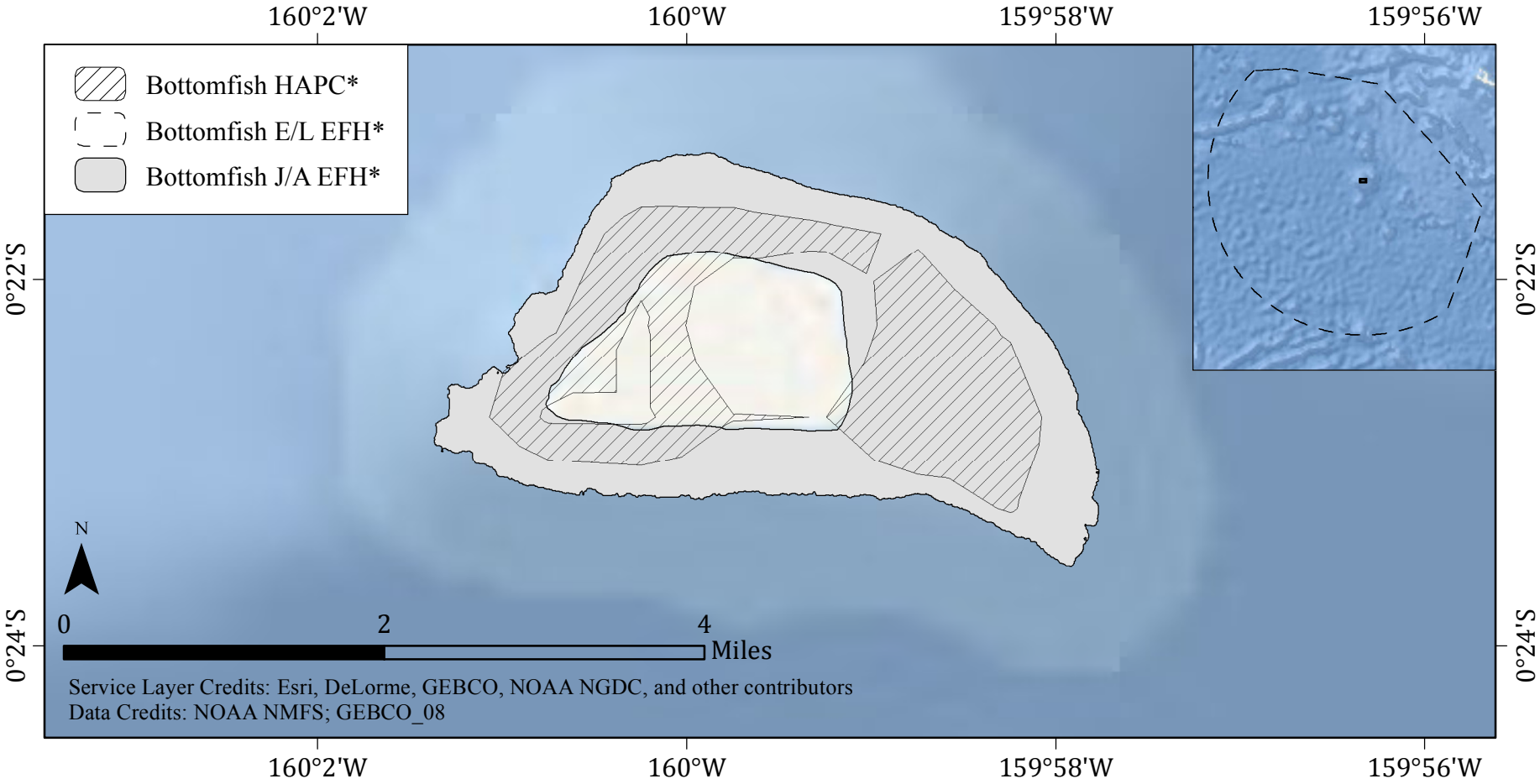
Pacific Remote Island Area Fishery Ecosystem Plan
Bottomfish EFH/HAPC: Jarvis Island



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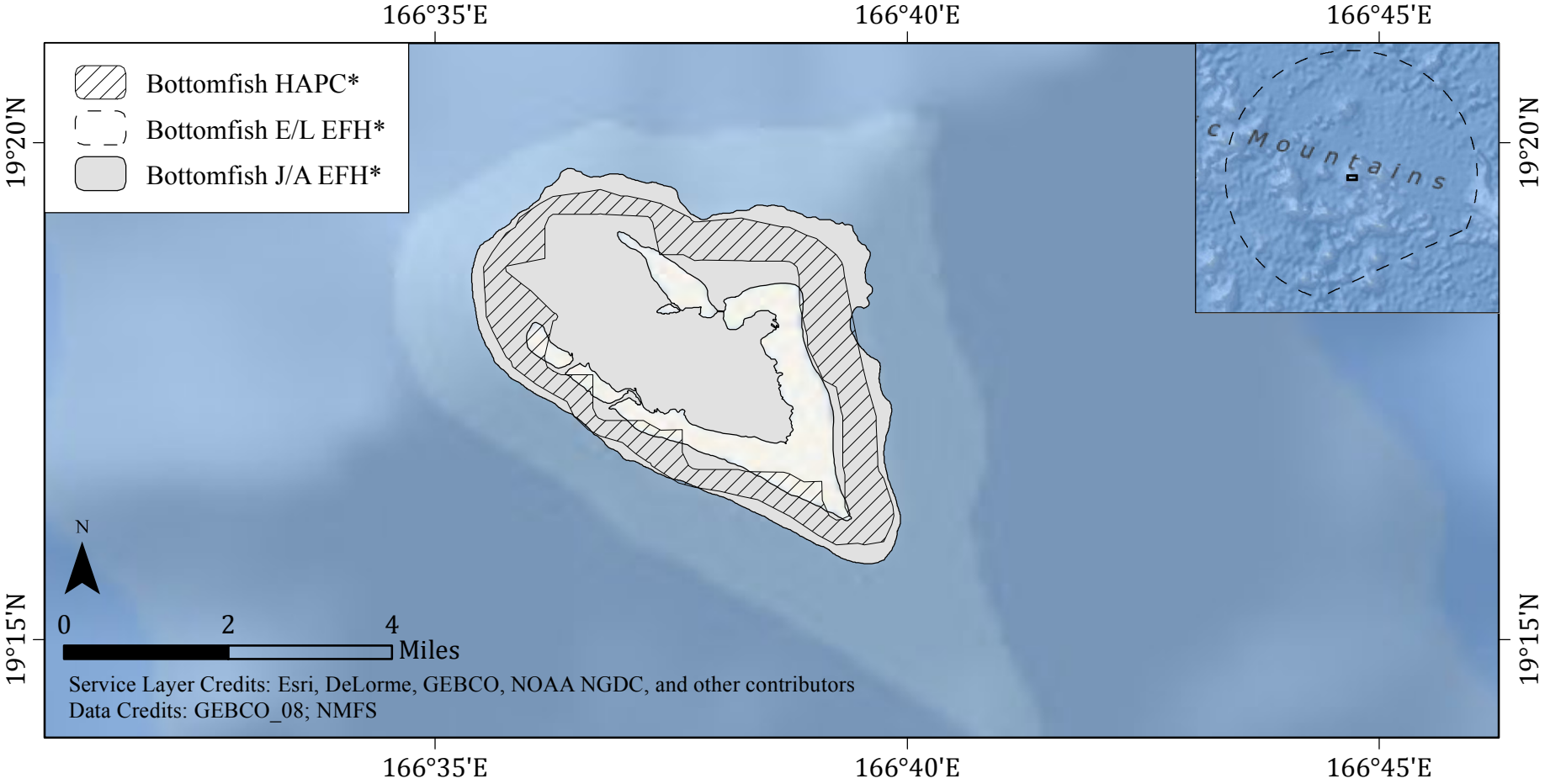
Pacific Remote Island Area Fishery Ecosystem Plan
Bottomfish EFH/HAPC: Wake Island



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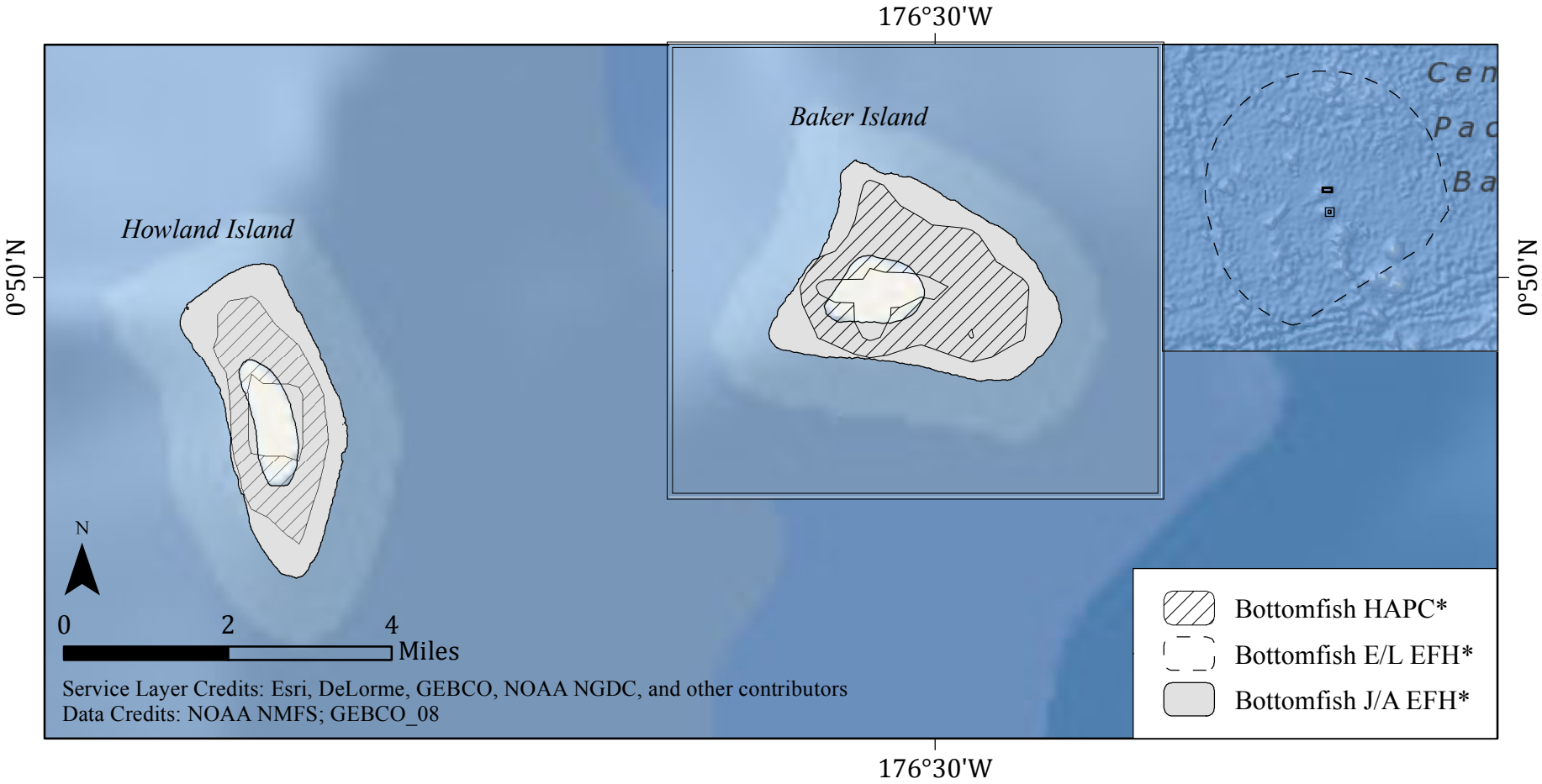
Pacific Remote Island Area Fishery Ecosystem Plan
Bottomfish EFH/HAPC: Howland and Baker Islands



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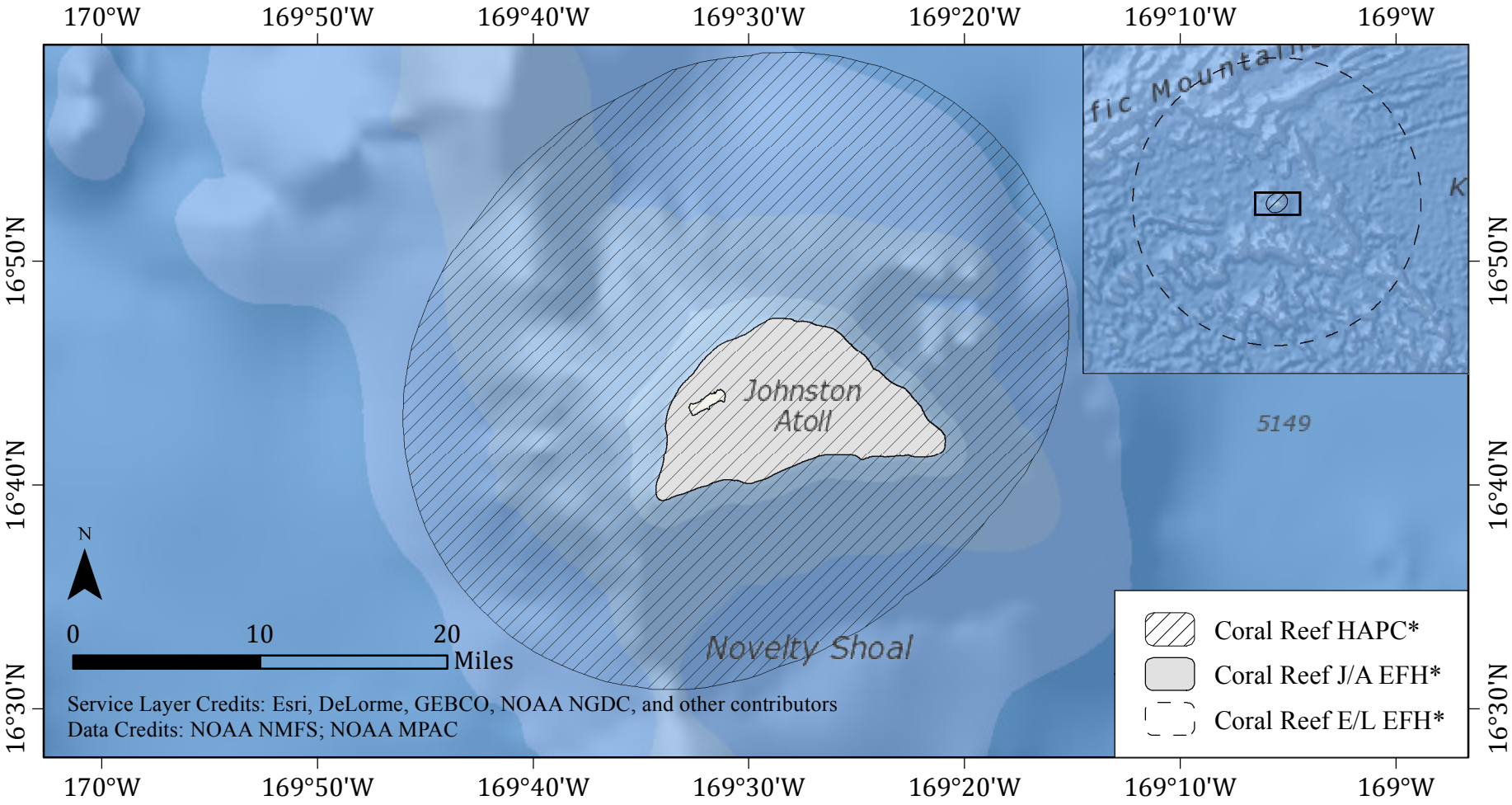
Pacific Remote Island Area Fishery Ecosystem Plan
Coral Reef EFH/HAPC: Johnston Atoll



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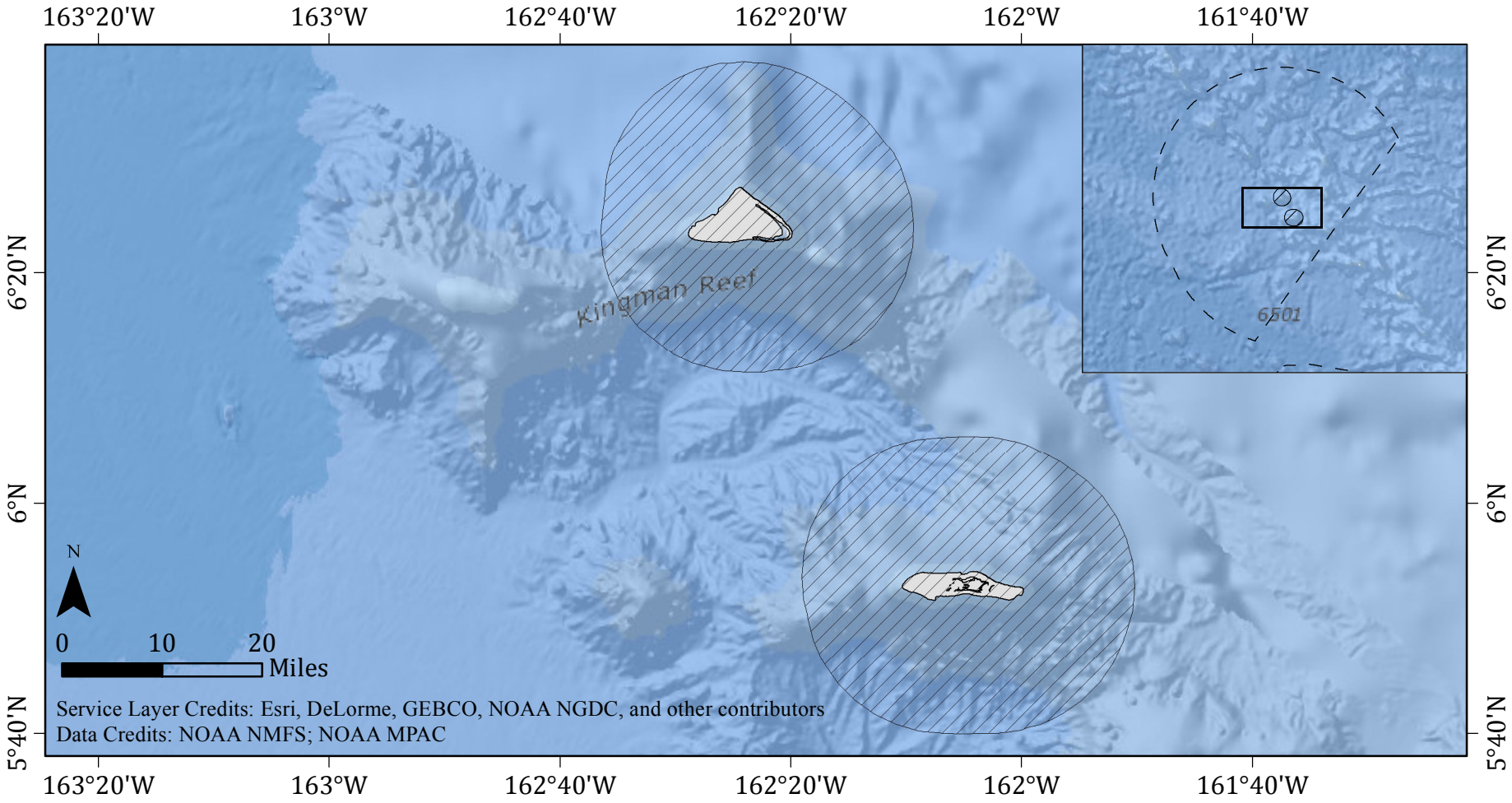
Pacific Remote Island Area Fishery Ecosystem Plan
Coral Reef EFH/HAPC: Palmyra Atoll and Kingman Reef



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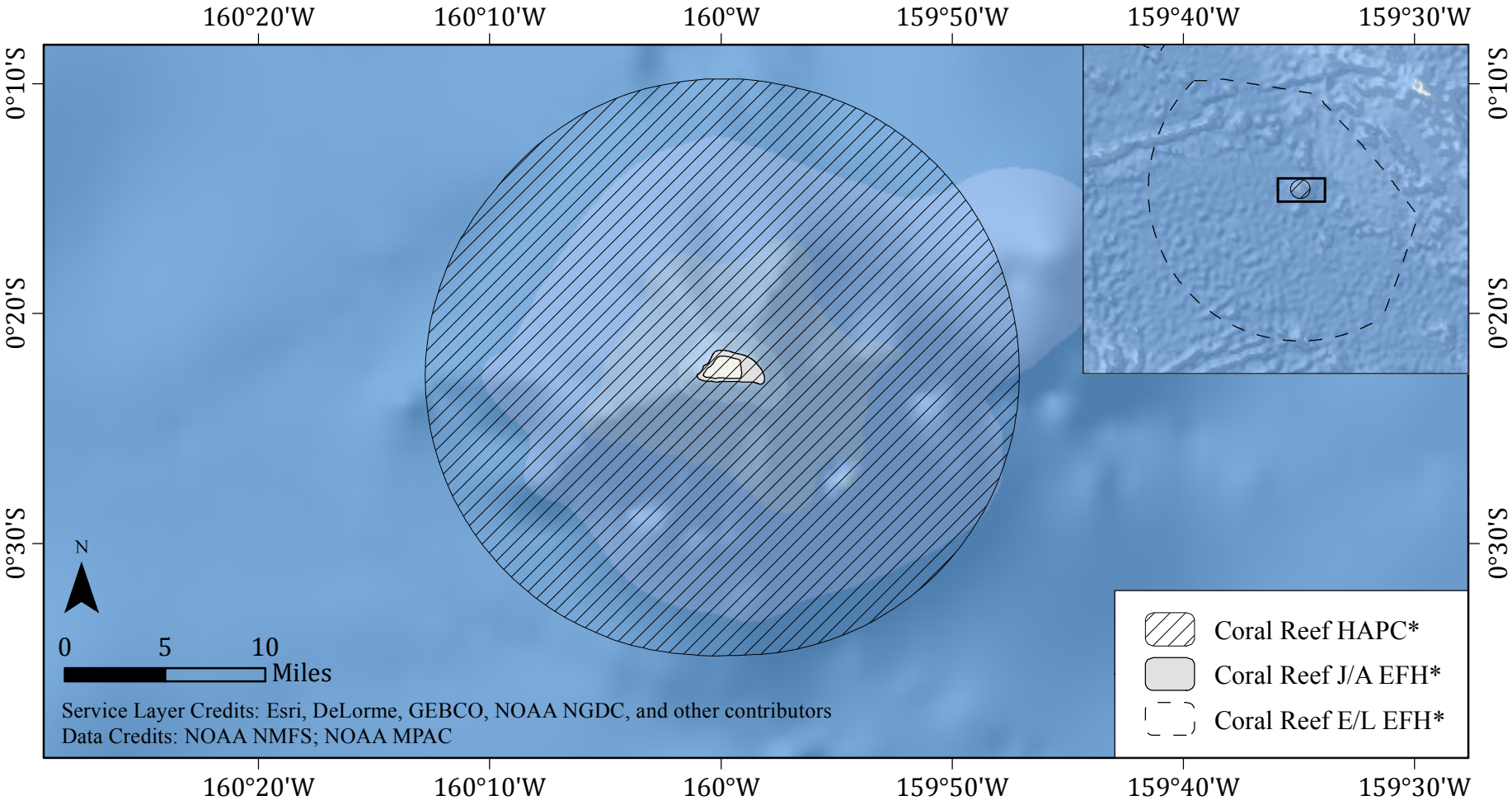

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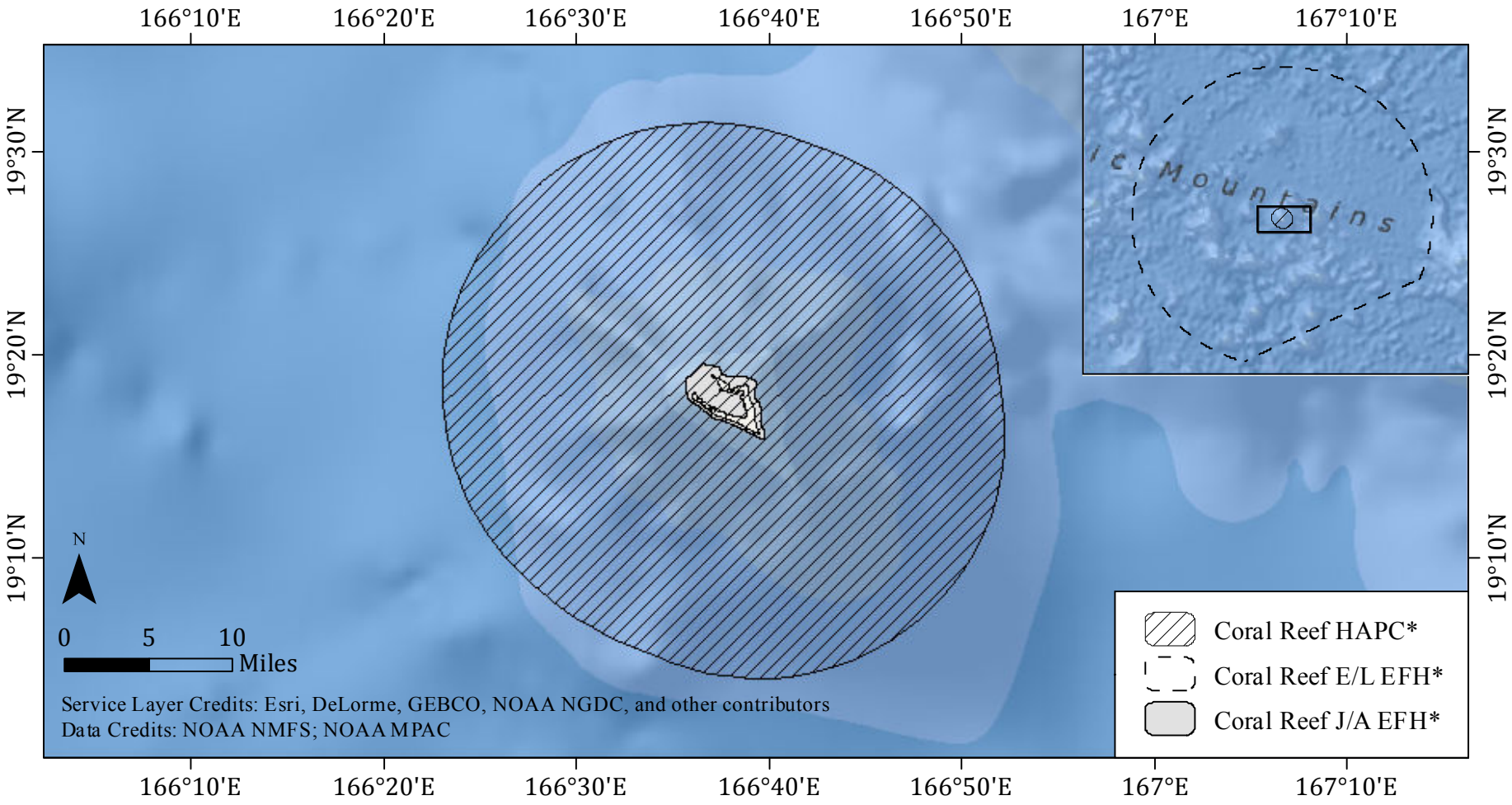
Pacific Remote Island Area Fishery Ecosystem Plan
Coral Reef EFH/HAPC: Wake Island



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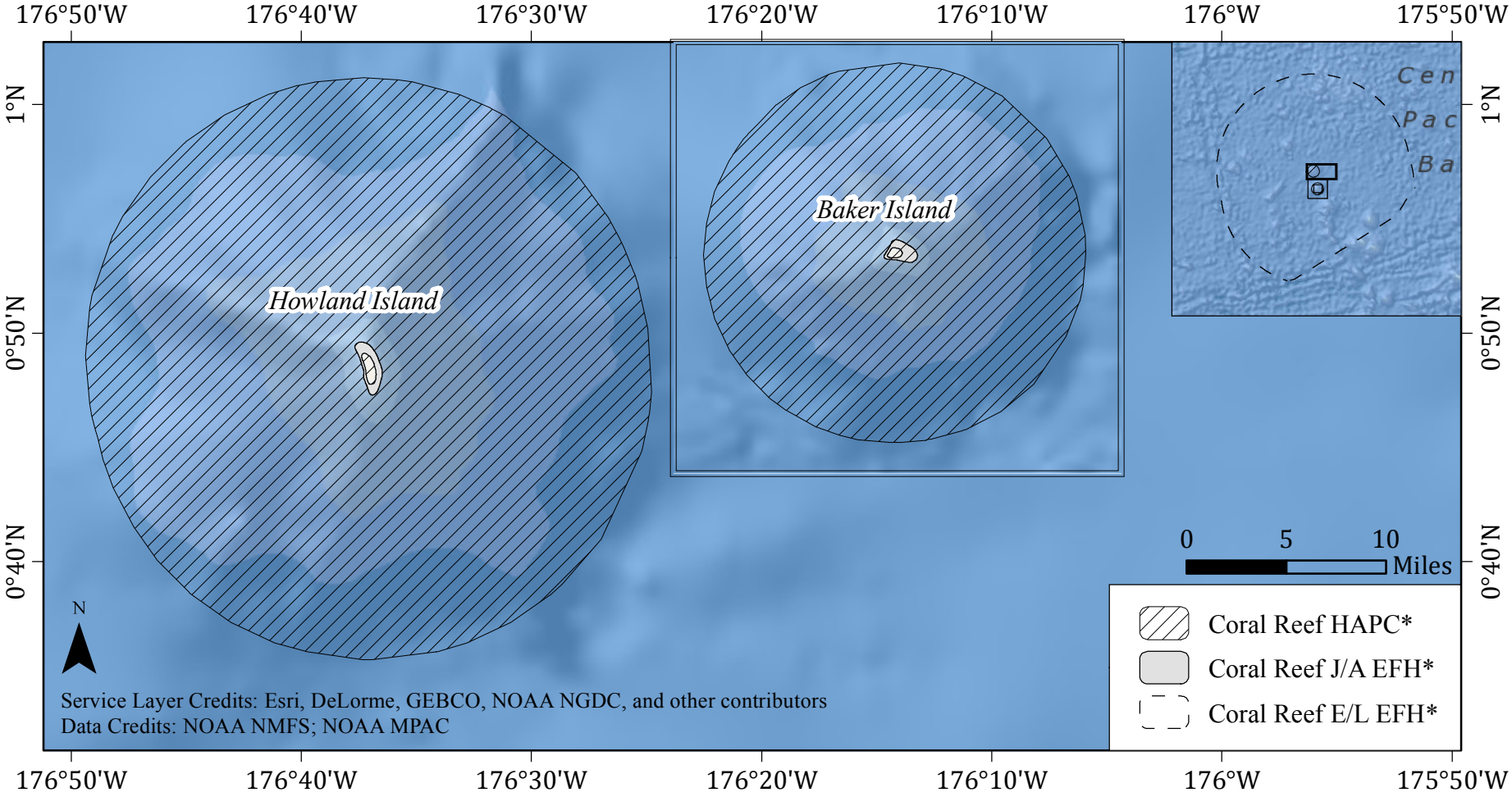
Pacific Remote Island Area Fishery Ecosystem Plan
Coral Reef EFH/HAPC: Howland and Baker Islands



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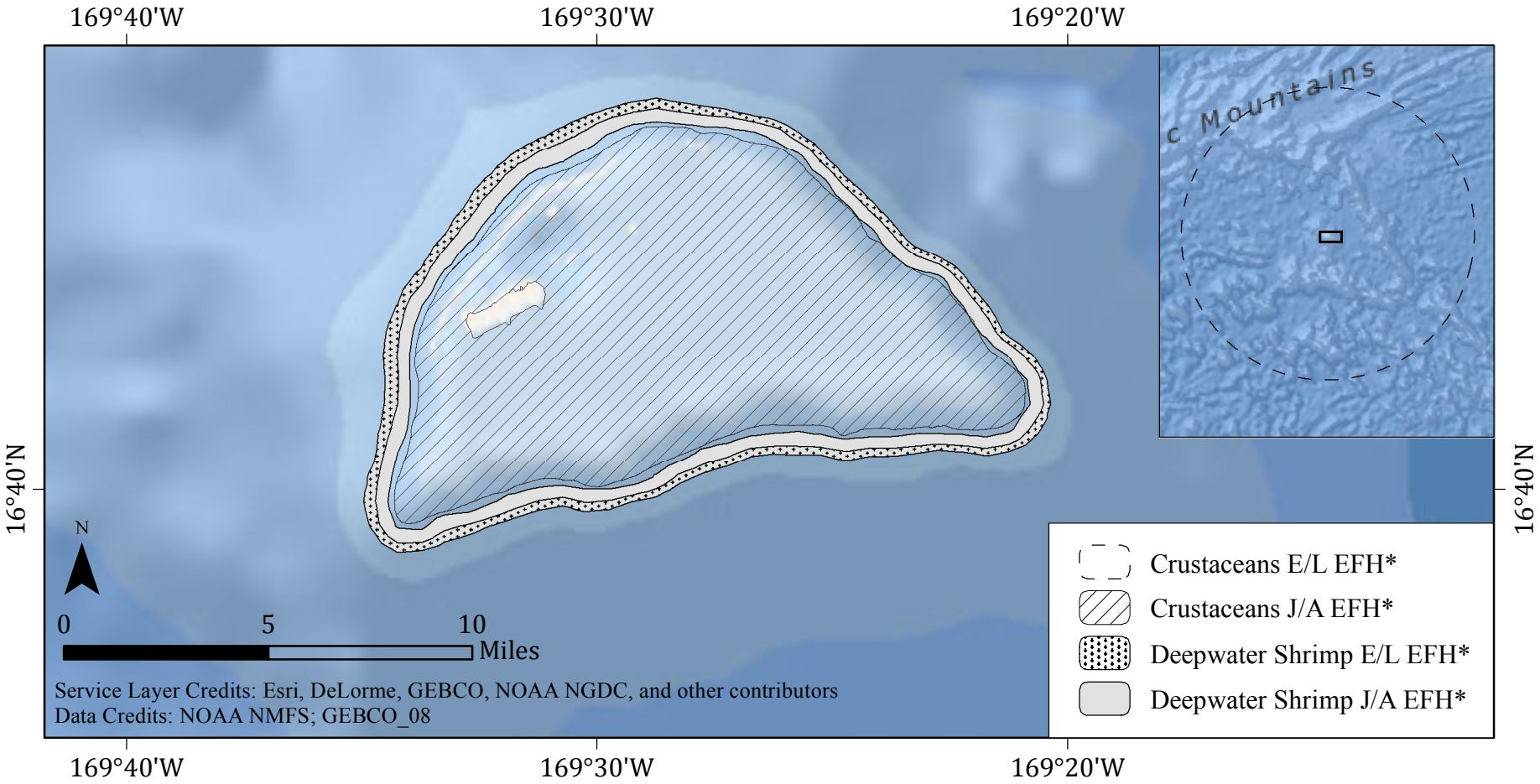
Pacific Remote Island Area Fishery Ecosystem Plan
Crustaceans EFH/HAPC: Johnston Atoll



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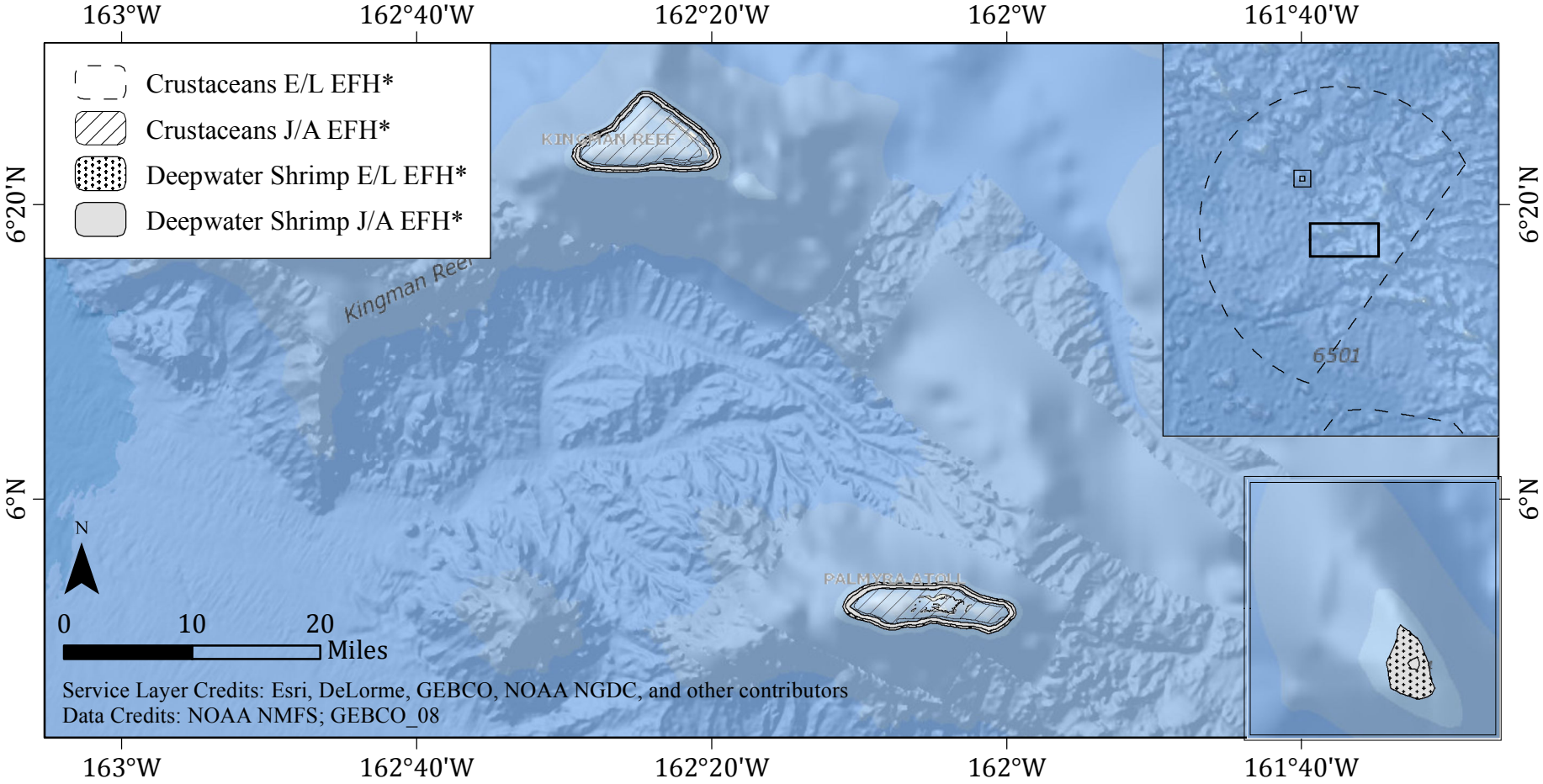
Pacific Remote Island Area Fishery Ecosystem Plan
Crustaceans EFH/HAPC: Palmyra Atoll and Kingman Reef



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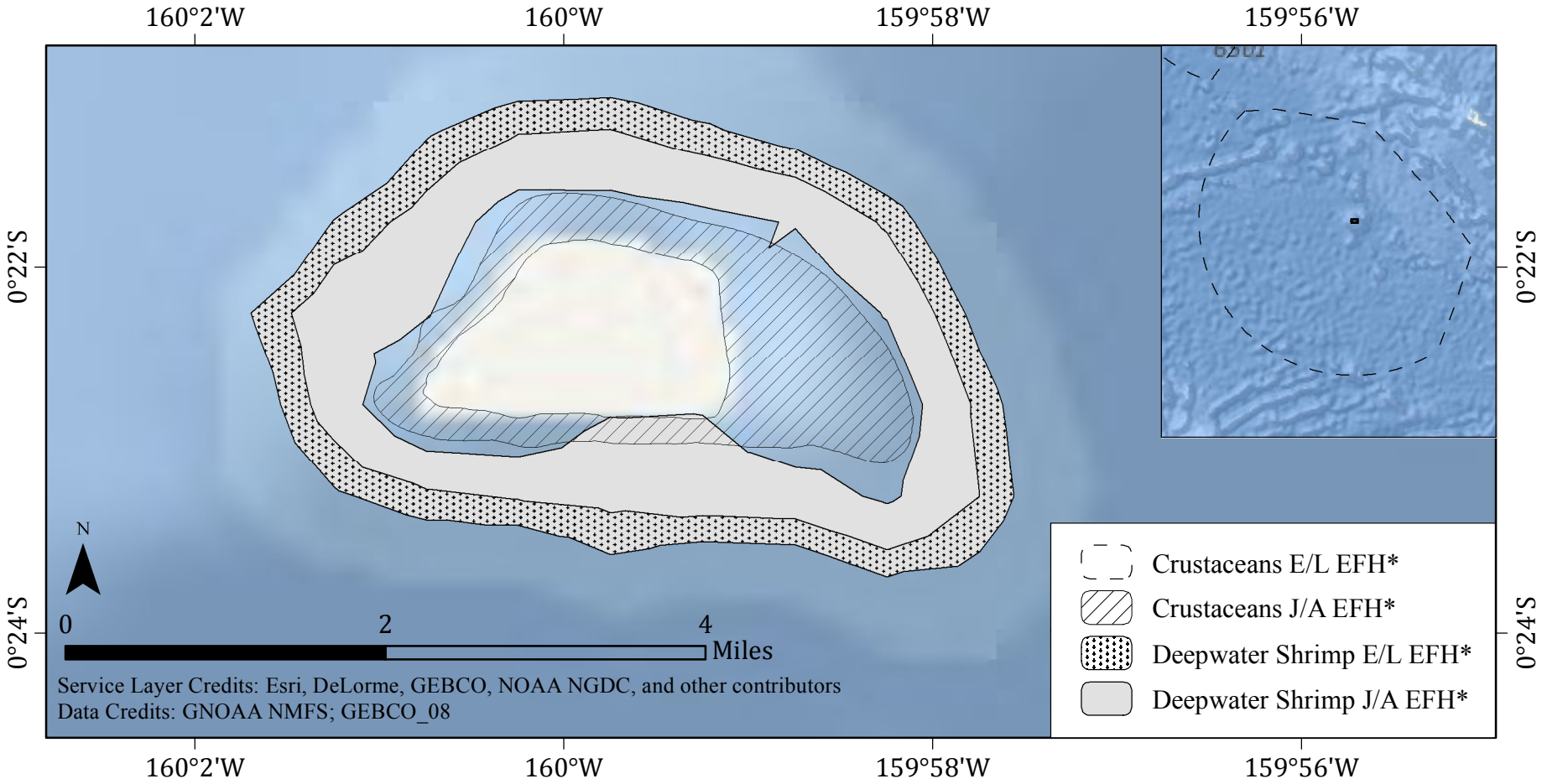
Crustaceans EFH/HAPC: Jarvis Island



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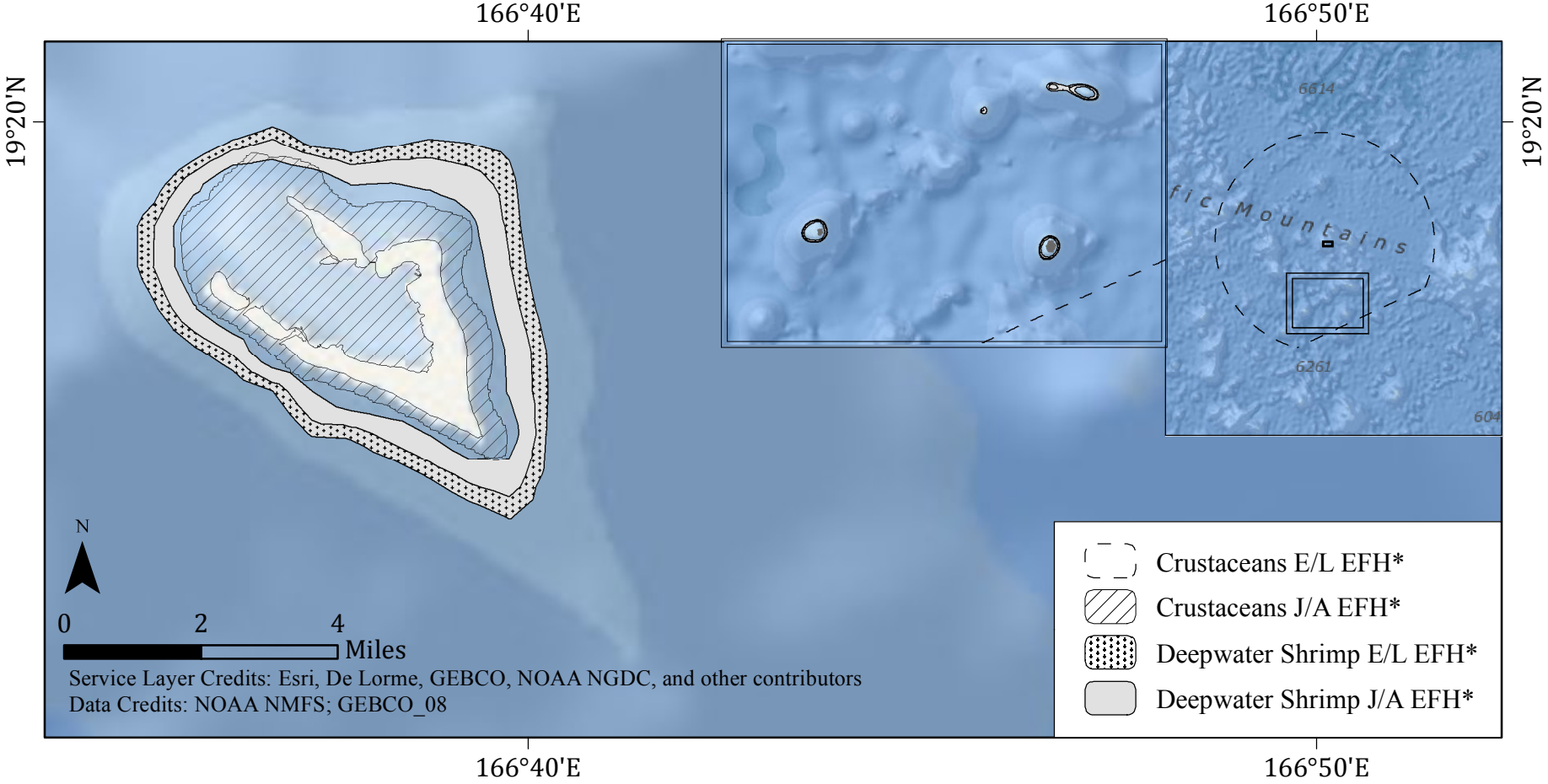
Pacific Remote Island Area Fishery Ecosystem Plan
Crustaceans EFH/HAPC: Wake Island



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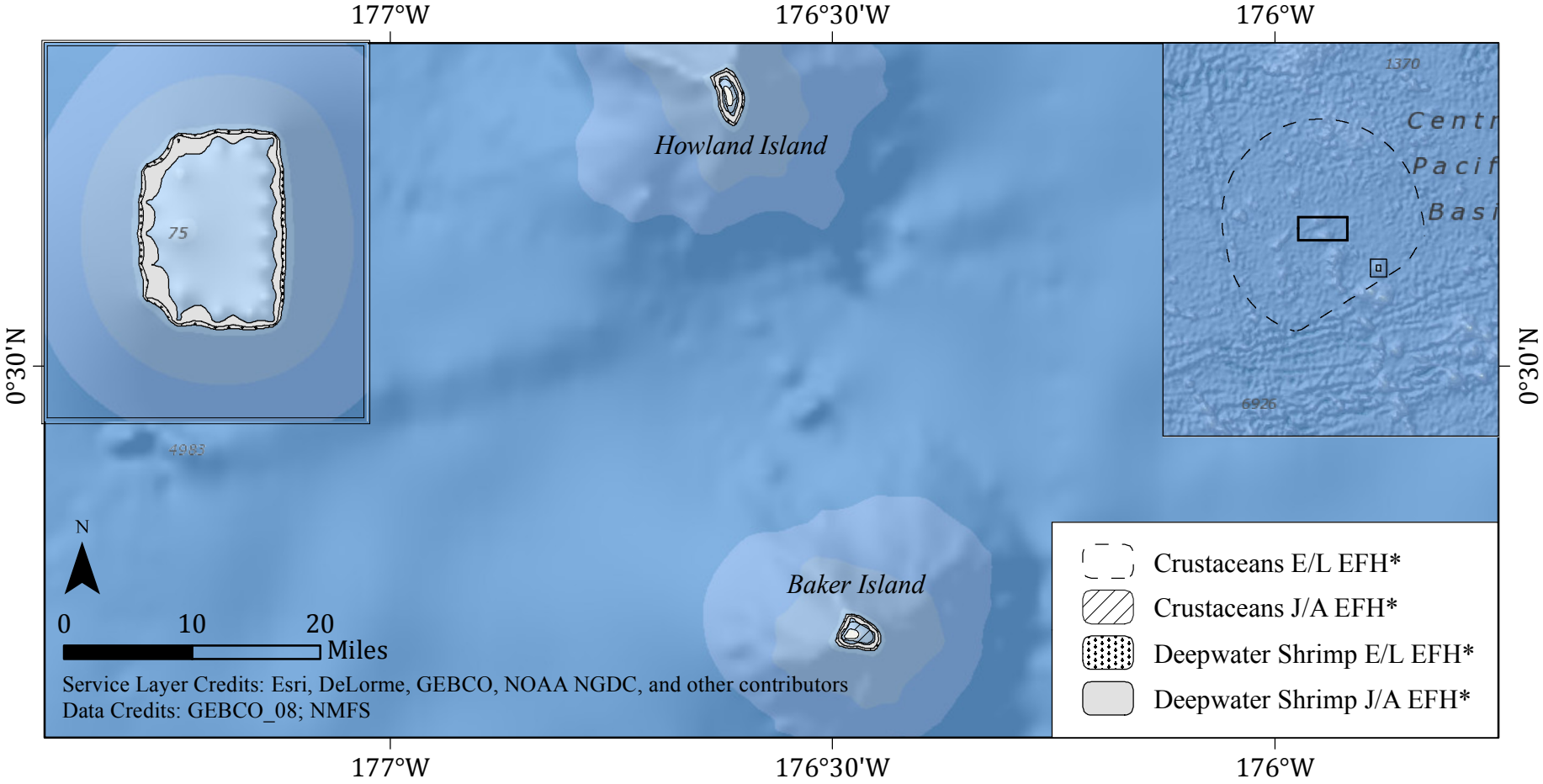

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