

### **3. PROBLEM STATEMENT AND NEED FOR ACTION**

On December 4, 2000, President Clinton issued Executive Order (EO) 13178 establishing the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve (Reserve). President Clinton subsequently revised portions of EO 13178 and completed establishment of the Reserve in EO 13196. The Reserve is managed by the National Marine Sanctuary Program which is within the National Oceanic and Atmospheric Administration (NOAA). Pursuant to the EOs and the National Marine Sanctuaries Act (16 U.S.C. 1433, 1434), NOAA is initiating the process to designate the Reserve as a National Marine Sanctuary. The National Marine Sanctuaries Act (NMSA) delegates the development and recommendation of fishing regulations in sanctuaries to Regional Fishery Management Councils.

At its 126<sup>th</sup> meeting (March 14-17, 2005 in Honolulu, Hawaii) the Western Pacific Regional Fishery Management Council (Council) took final action to recommend specific regulations regarding fishing in the proposed sanctuary. This document summarizes the alternatives considered, as well as describing the NWHI environment, and the anticipated impacts of the alternatives on fishery participants and support industries, Hawaii's broader communities, and the nation as a whole.

### **4. RESPONSIBLE AGENCY**

The Western Pacific Regional Fishery Management Council (Council or WPRFMC) was established by the Magnuson Fishery Conservation and Management Act of 1976 (Public Law 94-265; 16 U.C.S. 1801 *et. seq.*) to develop fishery management plans (FMPs) for fisheries operating in the U.S. Exclusive Economic Zone (EEZ) around American Samoa, Guam, Hawaii, the Commonwealth of the Northern Mariana Islands (CNMI) and the Pacific remote island areas (PRIAs).<sup>1</sup> Once an FMP is approved by the Secretary of Commerce (Secretary), it is implemented by Federal regulations, which are enforced by the National Marine Fisheries Service (NMFS, also known as NOAA Fisheries) and the U.S. Coast Guard in cooperation with state agencies.

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Howland, Baker, Wake and, Jarvis Islands, Kingman Reef and Johnston, Midway and Palmyra Atolls.

## **5. MANAGEMENT OBJECTIVES FOR THE PROPOSED NWHI NATIONAL MARINE SANCTUARY**

The general objective of the Council is to develop appropriate fishery management measures (and associated regulations) for the proposed NWHI National Marine Sanctuary. Under the National Marine Sanctuaries Act, and the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), these measures must be consistent with the 1) the purposes and policies of the National Marine Sanctuaries Act, 2) the National Marine Sanctuary Program's Goals and Objectives for the proposed Northwestern Hawaiian Islands National Marine Sanctuary, 3) the Council's Goal and Objectives for fisheries in the proposed Northwestern Hawaiian Islands National Marine Sanctuary, 4) the MSA's National Standards, and 5) the specific objectives of each Fishery Management Plan (FMP) for NWHI fisheries. These are enumerated below.

### **5.1 National Marine Sanctuary Act Purposes and Policies**

The NMSA details the following overall purposes and policies for the establishment of the National Marine Sanctuary System as:

*(1) to identify and designate as national marine sanctuaries areas of the marine environment which are of special national significance and to manage these areas as the National Marine Sanctuary System;*

*(2) to provide authority for comprehensive and coordinated conservation and management of these marine areas, and activities affecting them, in a manner which complements existing regulatory authorities;*

*(3) to maintain the natural biological communities in the national marine sanctuaries, and to protect, and, where appropriate, restore and enhance natural habitats, populations, and ecological processes;*

*(4) to enhance public awareness, understanding, appreciation, and wise and sustainable use of the marine environment, and the natural, historical, cultural, and archeological resources of the National Marine Sanctuary System;*

*(5) to support, promote, and coordinate scientific research on, and long-term monitoring of, the resources of these marine areas;*

*(6) to facilitate to the extent compatible with the primary objective of resource protection, all public and private uses of the resources of these marine areas not prohibited pursuant to other authorities;*

*(7) to develop and implement coordinated plans for the protection and management of these*

*areas with appropriate Federal agencies, State and local governments, Native American tribes and organizations, international organizations, and other public and private interests concerned with the continuing health and resilience of these marine areas;*

*(8) to create models of, and incentives for, ways to conserve and manage these areas, including the application of innovative management techniques; and*

*(9) to cooperate with global programs encouraging conservation of marine resources.*

## **5.2 National Marine Sanctuary Program Goals and Objectives**

The National Marine Sanctuary Program has adopted the following Goals and Objectives for the proposed NWHI National Marine Sanctuary as described in the September 20, 2004 document “Proposed Northwestern Hawaiian Islands National Marine Sanctuary - Advice and Recommendations on Development of Draft Fishing Regulations Under the National Marine Sanctuaries Act Section 304(a)(5)”:

*Goal 1: Protect, preserve, maintain, and where appropriate restore the natural biological communities, including habitats, populations, native species, and ecological processes, of the Sanctuary as a public trust for current and future generations.*

*Objectives:*

*1a. Develop and implement a comprehensive management plan that integrates best practices, available science, traditional knowledge, and innovative management techniques, and addresses both short-term and long-term resource protection needs.*

*1b. When there is uncertainty in available information regarding the potential impacts of any activity, err on the side of resource protection.*

*1c. Develop and implement the necessary prohibitions, rules, regulations and penalty schedules to achieve the primary purpose of resource protection and address the needs of the Sanctuary.*

*1d. Develop and implement surveillance and enforcement program needed to ensure compliance with regulations.*

*1e. Cooperate with regional and global programs encouraging conservation of marine resources.*

*Goal 2: Provide for comprehensive and coordinated conservation and management that recognizes and complements existing jurisdictional boundaries and management regimes and involves stakeholder communities.*

*Objectives:*

*2a. Develop and implement regional and global approaches, interagency agreements, and processes with partners to address key cross-jurisdictional activities such as education research and monitoring, enforcement and surveillance, and access.*

*2b. Create a permit, notification, and tracking systems for access and use that is compatible and coordinated with partner agencies.*

*2c. Coordinate all activities to minimize impacts to ecosystems, avoid redundant or duplicative efforts, and to achieve efficient use of agency resources.*

*2d. Engage representative stakeholder communities and the public in seeking advice for effective management.*

*Goal 3: Manage, minimize, or prevent negative human impacts by allowing access only for those activities that do not threaten the natural character or biological integrity of any ecosystem of the region.*

*Objectives:*

*3a. Allow access only for activities consistent with long-term ecosystem protection.*

*3b. The management system shall continue to allow Native Hawaiian cultural, religious, and subsistence uses.*

*3c. Develop a marine zoning system that prescribes further limits on use to enhance ecosystem protection and ease of management and enforcement.*

*3d. Develop a permit and tracking system to identify, evaluate, and monitor activities, access, and uses in order to ensure consistency with long-term ecosystem protection.*

*3e. Develop other measures as may be necessary to ensure long-term ecosystem protection.*

*3f. Work with the appropriate domestic and international agencies to adopt a notification requirement for transiting non-military vessels and the designation of special maritime zones on nautical charts.*

*Goal 4: Enhance public awareness, understanding, and appreciation of the marine environment and cultural and maritime heritage resources.*

*Objectives:*

*4a. Develop public outreach and education programs with partners to raise public awareness of NWHI marine ecosystems and the need to protect them and to effectively communicate access and use restrictions.*

*4b. In order to minimize the use of and impact to the region, plan and establish programs that emphasize the concept of bringing the place to the people, rather than the people to the place.*

*4c. Increase awareness of marine conservation in the NWHI by emphasizing the global nature of threats to the ecosystem and the importance of the region to the state, the nation, and the world.*

*4d. Enhance the effectiveness of education programs and public outreach by incorporating Native Hawaiian culturally based themes and traditional approaches to learning, multiple perspectives, histories, and stories of the region.*

*Goal 5: Support Native Hawaiian cultural, religious, and subsistence practices that are consistent with the long-term conservation and protection of the region.*

*Objectives:*

*5a. Build capacity within the Sanctuary program to develop a working relationship with Native Hawaiians to facilitate their participation in the management of the Sanctuary.*

*5b. Develop a plan for Native Hawaiian access and use in the NWHI collaboratively with Native Hawaiians and regional partners.*

*5c. Increase understanding of Native Hawaiian histories and cultural practices in the NWHI through research and oral traditions.*

*5d. Integrate Native Hawaiian traditional knowledge, values, and perspectives into management and education programs.*

*Goal 6: Support, promote, and coordinate research and long-term monitoring that improves management decision-making and is consistent with the conservation and protection of the region.*

*Objectives:*

*6a. Identify, assess, prioritize, and authorize ecological, historical, cultural, and socioeconomic research and monitoring necessary for effective management of the region.*

*6b. Coordinate with regional and national agencies to make vessels and other resources available for conservation and research activities.*

*6c. Compile existing research and avoid duplication by collaborating and coordinating with jurisdictional partner agencies and universities.*

*6d. Develop the ability to quickly assess and response to unexpected, rapid ecological changes that have occurred as a result of storm events, dramatic climate and temperature shifts, and other occurrences.*

*6e. Establish criteria for cultural research activities through consultation with Native Hawaiians.*

*6f. Work with partners and researchers to make NWHI research available and accessible to the public in a timely manner.*

*Goal 7: Maintain ecosystem integrity by limiting and controlling fishing activities using an ecosystem-based management approach. Maximize ecosystem protection while minimizing adverse socioeconomic impacts. Limit fishing activities to areas that minimize or prevent interactions with corals, seabirds, endangered Hawaiian monk seals, and other protected wildlife, or that do not threaten the natural character or biological integrity of any ecosystem of the region.*

*Objectives: As appropriate to maintain the natural character or biological integrity of any ecosystem of the region:*

*7a. Prohibit non-subsistence crustacean fishing.*

*7b. Prohibit commercial precious coral fishing.*

*7c. Prohibit harvest of all coral species, live rock, all aquaria species and live fish trade species, and algae, sponges, and other invertebrates.*

- 7d. Allow recreational fishing for pelagic species except within sensitive habitats.*
- 7e. Allow bottomfishing to continue except within sensitive habitats.*
- 7f. Allow commercial pelagic fishing using handline, pole and line and trolling gear except within sensitive habitats.*
- 7g. Prohibit subsistence use within the sanctuary except for Native Hawaiian subsistence use*
- 7h. Allow sustenance fishing for pelagic and bottomfish species using pole and line, trolling and handline methods within the Sanctuary except within sensitive habitats.*
- 7i. Allow spearfishing without the use of SCUBA for pelagic species except within sensitive habitats.*
- 7j. All fishing not specifically allowed shall be prohibited.*
- 7k. When there is uncertainty in available information regarding the potential impacts of any fishing activity, err on the side of resource protection.*

### **5.3 Western Pacific Regional Fishery Management Council Goal and Objectives for Fisheries**

The Council has adopted the following Goal and Objectives for fisheries in the proposed NWHI National Marine Sanctuary:

*Goal: Maintain ecosystem integrity by applying ecosystem-based management and research principles to fishing activities. Sustain ecosystem protection while minimizing adverse socioeconomic impacts*

*Objectives:*

- 7a. Protect ecosystem integrity by applying a precautionary approach and continuing research on crustaceans and precious corals fisheries to determine if, and how, harvests can be allowed without damaging the integrity of the NWHI ecosystem.*
- 7b. Protect the substrate of the NWHI ecosystem through prohibitions on the collection of reef building corals and live rock.*
- 7c. Protect ecologically valuable areas from damage resulting from fishing activities, consistent with available biological and ecological information.*
- 7d. Protect Hawaiian monk seals, sea turtles, seabirds and other protected wildlife by*

*controlling fishing activities in areas where interactions are known to occur.*

*7e. Maintain ecosystem integrity by controlling the harvests of pelagic, bottomfish, and coral reef associated species consistent with available biological and ecological information.*

*7f. Maintain ecosystem integrity while minimizing adverse socioeconomic and cultural impacts.*

*7g. Employ principles of equity and fairness when allocating fishing rights.*

*7h. Protect Native Hawaiian cultural rights by promoting access for non-commercial fishing uses by Native Hawaiians to the extent possible without damaging the integrity of the NWHI ecosystem.*

*7i. Promote increased understanding of the NWHI ecosystem through comprehensive and coordinated research.*

*7j. Apply ecosystem-based principles through coordinated management with NWHI management and research partners.*

#### **5.4 Magnuson-Stevens Fishery Conservation and Management Act National Standards**

The MSFCMA National Standards are as follows:

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

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

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

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

*National Standard 5 -- Conservation and management measures shall, where practicable,*



*consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.*

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

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

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

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

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

## **5.5 Bottomfish and Seamount Groundfish Fishery Management Plan Objectives**

The objectives of the Bottomfish and Seamount Groundfish FMP are as follows:

*Objective 1. Protect against overfishing and maintain long-term productivity of bottomfish stocks*

*Objective 2. Improve the database for future decisions through data reporting requirements and cooperative Federal/State/Territory programs.*

*Objective 3. Provide for consistency in Federal/State/Territory bottomfish management to ensure effective management across the range of fisheries*

*Objective 4. Protect bottomfish stock and habitat from environmentally destructive fishing activities and enhance habitat if possible.*

*Objective 5. Maintain existing opportunities for rewarding experiences by small-scale commercial, recreational, and subsistence fishermen, including native Pacific islanders.*

*Objective 6. Maintain consistent availability of high quality products to consumers.*

*Objective 7. Maintain a balance between harvest capacity and harvestable fishery stocks to prevent over-capitalization.*

*Objective 8. Avoid taking protected species and minimize possible adverse modifications to their habitat*

*Objective 9. Restore depleted groundfish stocks and to provide the opportunity to US fishermen to develop new domestic fisheries for groundfish which will displace foreign fishing.*

*Objective 10. Monitor stock recovery of depleted stocks in the FCZ [EEZ] so that any international plan action for managing the common resource can be guided by experimental results.*

## **5.6 Crustaceans Fishery Management Plan Objectives**

The objectives of the Crustaceans FMP are as follows:

*Objective 1. To ensure the long term productivity of the stock and prevent overfishing;*

*Objective 2. To promote the efficient contribution of the spiny lobster resource to the national economy ;*

*Objective 3. To collect and analyze biological and economic information about the lobster fishery and improve the basis for conservation and management in the future;*

*Objective 4. To prevent unfavorable impacts of the fishery on Hawaiian monk seals and other endangered and threatened species.*

## **5.7 Precious Corals Fishery Management Plan Objectives**

The objectives of the Precious Corals FMP are as follows:

*Objective 1. Allow a fishery for precious coral in the EEZ in the western Pacific but limit the fishery so as to achieve the Optimum Yield on a continuing basis;*

*Objective 2. Prevent overfishing and wastage of resources;*

*Objective 3. Encourage the use of selective harvesting methods;*

*Objective 4. Minimize the harvest of colonies of coral which are immature;*

*Objective 5. Minimize the harvest of colonies of coral which have not reached their full potential for growth; and*

*Objective 6. Encourage the acquisition and analysis of new information concerning the*

*distribution, abundance and ecology of precious corals.*

## **5.8 Coral Reef Ecosystems Fishery Management Plan Objectives**

The objectives of the Coral Reef Ecosystems FMP are as follows:

*Objective 1. To foster sustainable use of multi-species resources in an ecologically and culturally sensitive manner, through the use of the precautionary approach and ecosystem-based resource management.*

*Objective 2. To provide a flexible and responsive management system for coral reef resources that can rapidly adapt to changes in resource abundance, new scientific information, and changes in fishing patterns among user groups or by area.*

*Objective 3. To establish integrated resource data collection and permitting systems, establish a research and monitoring program to collect fishery and other ecological information, and to collect scientific data necessary to make informed management decisions about coral reef ecosystems in the EEZ.*

*Objective 4. To minimize adverse human impacts on coral reef resources by establishing new—and improving existing—marine protected areas, managing fishing pressure, controlling wasteful harvest practices, reducing other anthropogenic stressors directly affecting coral reef resources, and allowing the recovery of naturally-balanced reef systems. This objective includes the conservation and protection of essential fish habitats.*

*Objective 5. To improve public and government awareness and understanding of coral reef ecosystems and their vulnerability and resource potential in order to reduce adverse human impacts and foster support for management.*

*Objective 6. To collaborate with other agencies and organizations concerned with the conservation of coral reefs, in order to share in decision-making and to obtain and share data and resources needed to effectively monitor this vast and complex ecosystem.*

*Objective 7. To encourage and promote improved surveillance and enforcement to support the plan's management measures.*

*Objective 8. To provide for sustainable participation by fishing communities in coral reef fisheries and, to the extent practicable, minimize the adverse economic impacts on such communities.*

## **5.8 Pelagics Fishery Management Plan Objectives**

The objectives of the Pelagics FMP are as follows:

*Objective 1. To manage fisheries for management unit species in the Western Pacific Region to achieve optimum yield (OY);*

*Objective 2. To promote, within the limits of managing at OY, domestic harvest of the management unit species in the Western Pacific EEZ and domestic fishery values associated with these species, for example, by enhancing the opportunities for:*

- a. satisfying recreational fishing experiences,*
- b. continuation of traditional fishing practices for non-market personal consumption and cultural benefits,*
- c. domestic commercial fishermen, including charter boat operations, to engage in profitable fishing operations,*

*Objective 3. To diminish conflicts in the EEZ, particularly in areas of concentrated domestic fishing,*

*Objective 4. To improve the statistical base for conducting better stock assessments and fishery evaluations thus supporting fishery management and resource conservation in the EEZ and throughout the range of the management unit species,*

*Objective 5. To promote the formation of a regional or international arrangement for assessing and conserving the management unit species and tunas throughout their range,*

*Objective 6. To preclude waste of management unit species associated with longline, purse seine, pole-and-line or other fishing operations; and*

*Objective 7. To promote within the limits of managing OY, domestic marketing of the management unit species in American Samoa Guam, NMI and Hawaii.*

## **6. ALTERNATIVES FOR FISHERY MANAGEMENT IN THE PROPOSED NWHI NATIONAL MARINE SANCTUARY**

This section describes the alternatives considered for NWHI fishery regulations. The seven alternatives represent an ongoing discussion concerning this issue and were chosen to illustrate a wide spectrum of management alternatives ranging from doing nothing to closing virtually all NWHI fisheries.

### **6.1 Alternative 1A: FMP Status Quo (No Action A)**

Under this alternative, NWHI federal fisheries would be conducted according to the existing management measures of the following Fishery Management Plans developed and implemented for the NWHI by the Western Pacific Regional Fishery Management Council and the National Marine Fisheries Service (NMFS). In general, these measures apply within federal waters 3-200 miles from shore, as waters 0-3 miles from shore are managed by the Fish and Wildlife Service and Hawaii's Department of Land and Natural Resources. Please see section 660 of Title 50 of

the Code of Federal Regulations for a complete description of the following federal fishery regulations.

#### **6.1A Bottomfish and Seamount Groundfish FMP**

The NWHI bottomfish fishery is divided into two sections, the more northern Ho'omalū Zone and the southerly Mau Zone. Each zone is managed under a limited entry program with no more than 7 vessels allowed in the Ho'omalū Zone and no more than 10 allowed in the Mau Zone. Bottom trawling, nets, poison, explosives and other destructive gears are prohibited. Vessels can be no more than 60 ft in length and vessel captains must attend protected species workshops and carry federal observers if requested by NMFS. Fishing for armorhead is prohibited on the Hancock Seamount while stocks recover from the impacts of foreign fishing prior to the implementation of the Magnuson-Stevens Fishery Conservation and Management Act.

The Bottomfish and Seamount Groundfish FMP was implemented in 1986. It prohibits certain destructive fishing techniques, including explosives, poisons, trawl nets and bottom-set gillnets; establishes a moratorium on the commercial harvest of seamount groundfish stocks at the Hancock Seamounts; and implements a permit system for fishing for bottomfish in the EEZ around the NWHI. (The moratorium on the commercial harvest of seamount groundfish stocks at the Hancock Seamounts, the only exploitable seamount habitat in the management area, remains in effect. At its 123<sup>rd</sup> meeting (June 21-24, 2004), the Council approved an extension of the moratorium until August 31, 2010 (69 FR 51400). Consequently, there is no seamount groundfish fishery in the region. The plan also establishes a management framework that includes adjustments such as catch limits, size limits, area or seasonal closures, fishing effort limitation, fishing gear restrictions, access limitation, permit and/or catch reporting requirements and a rules-related notice system.

Implemented in 1987, Amendment 1 includes the establishment of potential limited access systems for bottomfish fisheries in the EEZ surrounding American Samoa and Guam within the framework measures of the FMP. Amendment 2 (1988) divides the EEZ around the NWHI into two zones: the Ho'omalū Zone to the northwest and the Mau Zone to the southeast. The amendment also establishes a limited access system for the Ho'omalū Zone. Amendment 3 (1991), which has been supplanted by Amendment 6, 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 percent. Amendment 3 also delineated the process by which overfishing is monitored and evaluated. Amendment 4 (1990) requires vessel owners or operators to notify NMFS at least 72 hours before leaving port if they intend to fish in a 50 nm "protected species study zone" around the NWHI. This notification allows federal observers to be placed on board bottomfish vessels to record interactions with protected species if this action is deemed necessary. Amendment 5 (1999) establishes a limited access system for the Mau Zone and a framework for a Western Pacific Community Development Program. Amendment 6 (1999) identifies and describes essential fish habitat for managed species of bottomfish, discusses measures to minimize bycatch and bycatch mortality in the bottomfish fishery, provides criteria

for identifying when overfishing has occurred in the fishery and describes fishing communities in the Region. Amendment 6 initially was only partially approved, with the provisions for bycatch, overfishing and fishing communities in Hawaii disapproved. The disapproved provisions were rewritten and the revised provisions have been implemented. Amendment 7 was prepared and transmitted to NMFS for approval in parallel with the FMP for Coral Reef Ecosystems of the Western Pacific Region. This amendment prohibits the harvest of Bottomfish and Seamount Groundfish Management Unit Species (BMUS) in the no-take marine protected areas established under the Coral Reef Ecosystems FMP. The Coral Reef Ecosystems establishes such areas around Rose Atoll in American Samoa, Kingman Reef, Jarvis Island, Howland Island, and Baker Island. No-take areas were also recommended for the NWHI, but all measures recommended in the Coral Reef Ecosystems FMP that would have applied to the waters around the NWHI (including Midway) were disapproved because of possible conflict and duplication with Executive Orders 13178 and 13196. Accordingly, NMFS issued a Record of Decision on June 14, 2002 that partially approved the Coral Reef Ecosystems FMP and Amendment 7 to the Bottomfish FMP. A final rule implementing the Coral Reef Ecosystems FMP (including Amendment 7 to the Bottomfish FMP) was published on February 24, 2004 (69 FR 8336).

Amendment 1 became effective on November 11, 1987 (52 FR 38102, October 14, 1987) and 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.

Amendment 2 became effective on September 6, 1988 (53 FR 299907, August 9, 1988) and divided the EEZ around the NWHI into two zones, the more distant Ho'omalua Zone and the closer Mau Zone. A limited access system was established for the Ho'omalua 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 Ho'omalua Zone. Under Amendment 2, new entrants to both fisheries must complete a protected species workshop prior to receiving their permits. The Mau Zone is intended to serve as an area where fishermen can gain experience fishing in the NWHI, thereby enhancing their eligibility for subsequent entry into the Ho'omalua Zone.

Amendment 3, which became effective on January 16, 1991 (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.

Amendment 4 became effective on May 26, 1991 (56 FR 24351, May 30, 1991). It implemented a requirement for vessel owners or operators to notify the National Marine Fisheries Service 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. This notification allows federal observers to be placed on board bottomfish vessels to record interactions with protected species if this action is deemed necessary.

Amendment 5 became effective on May 28, 1999 (64 FR 22810, April 28, 1999). It established a limited entry program for the Mau Zone in the NWHI with non-transferable permits and landing requirements for permit renewal. Included in requirements for permit issuance was attendance by the primary vessel operator at a protected species workshop. Amendment 5 also established a Western Pacific Community Development Program (CDP) under which 20% of Mau Zone permits are reserved for CDP participants, as well as instituting a maximum vessel length of 60' for replacement vessels in the Ho'omalulu or Mau Zones.

Amendment 6 addressed new requirements under the 1996 Sustainable Fisheries Act (SFA). Portions of the amendment that were immediately approved include designations of essential fish habitat and descriptions of some fishing communities. Those provisions became effective on February 3, 1999 (64 FR 19067). Remaining portions that were approved on August 5, 2003 (68 FR 46112) were provisions regarding Hawaii fishing communities, overfishing definitions, and bycatch.

Amendment 7 was prepared and transmitted to NMFS for approval in parallel with the FMP for Coral Reef Ecosystems of the Western Pacific Region. This amendment prohibits the harvest of Bottomfish and Seamount Groundfish Management Unit Species (BMUS) in the no-take marine protected areas established under the Coral Reef Ecosystems FMP. The Coral Reef Ecosystems establishes such areas around Rose Atoll in American Samoa, Kingman Reef, Jarvis Island, Howland Island, and Baker Island. No-take areas were also proposed for the NWHI, but all measures proposed in the Coral Reef Ecosystems FMP that would have applied to the waters around the NWHI (including Midway) were disapproved because of possible conflict and duplication with the management regime of the NWHI Coral Reef Ecosystem Reserve. Accordingly, NMFS issued a Record of Decision on June 14, 2002 that partially approved the Coral Reef Ecosystems FMP and Amendment 7 to the Bottomfish FMP. A final rule implementing the Coral Reef Ecosystem FMP (including Amendment 7 to the Bottomfish FMP) was published on February 24, 2004 (69 FR 8336).

Amendment 8 is now being processed by NMFS and would include the federal waters around the Commonwealth of the Northern Mariana Islands and the Pacific Remote Island Areas under the FMP and would designate 49 additional bottomfish species as BMUS.

Amendment 9 is also now being processed by NMFS and would prohibit vessels greater than 50' in length overall from targeting Bottomfish Management Unit Species within 50 miles of Guam, and would require these vessels to obtain federal permits and to submit federal logbooks.

### **6.1B Crustaceans FMP**

A similar limited entry program is in place for the NWHI lobster fishery, with no more than 15 vessels allowed in the NWHI. The fishery is further limited by an annual harvest guideline. Because the majority of fishing occurs around Necker Island, Maro Reef, and Gardner Pinnacles, this harvest guideline is divided into four fishing areas (the fourth is "all other areas"). No harvest guideline has been issued by NMFS for this fishery since 1999, due to uncertainties in the

population modeling results. This model calculates the exploitable biomass in each fishing area, managers then determine the annual harvest based on a given risk of overfishing ratio. Through 1999 this ratio indicated that an annual harvest of 13% of the exploitable population was associated with a 10% risk of overfishing, and these were the harvest and risk levels that were chosen. When an anticipated new model is released by NMFS it may contain a different risk ratio and managers may have to choose a new harvest level to maintain the 10% risk level. Fishery participants must use specified traps designed to allow small lobsters to escape, as well as to prevent monk seal entanglement. Federal observers are carried on every vessel and no lobster fishing is permitted within 20 miles of Laysan Island or within 10 fathoms of all other NWHI.

Initial provisions of the Fishery Management Plan which was initially named the FMP for “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 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.

The FMP was implemented in 1983. Initial provisions in the FMP include: a prohibition on fishing for spiny lobster within 20 nm of Laysan Island and within the EEZ landward of the 10 fm curve as depicted on National Ocean Survey Charts Numbers 19022, 19019, and 19016; a minimum size limit; requirements for gear design; prohibitions on retention of ovigerous females; and a mandatory logbook program. Since its implementation in 1983, the FMP has been amended ten times. Amendment 1, implemented in 1983, adopted State of Hawai‘i regulations in the EEZ around the main Hawaiian Islands (MHI). Amendment 2, implemented in 1983, specified trap opening dimensions. Amendment 3, implemented in 1985, clarified definitions for minimum size and tail length. Amendment 4, implemented in 1986, prohibited all lobster fishing in the FMP closed areas in the NWHI. Amendment 5, implemented in 1987, established a minimum size for retained slipper lobsters and required escape panels in traps. Amendment 6, implemented in 1990, defined recruitment overfishing. Amendment 7, implemented in 1991, established a closed season, limited access system and adjustable annual harvest quota. Amendment 8, implemented in 1994, eliminated the “use-it-or-lose-it” landing requirement for permittees. Amendment 9, implemented in 1995, revised the annual harvest guideline and, based on high discard mortality rates, replaced minimum size and condition restrictions in the NWHI with a “retain-all” fishery in which every lobster brought aboard is counted against the annual harvest guideline. Amendment 10, implemented in 1998, identified and described essential fish habitat for crustacean management unit species, discussed measures to minimize bycatch and bycatch mortality, and provided criteria for identifying when overfishing has occurred. In 1998, bank-specific harvest guidelines were established through a framework regulatory measure. The annual harvest guideline represents 13 percent of the exploitable population, which results in a 10 percent chance of overfishing the lobster stock at a particular permit area. In 1999, a process



was established by which NMFS is authorized, in consultation with the Council, to allocate the annual harvest guideline among permit subareas (i.e. Necker Island, Gardner Pinnacles and all other NWHI lobster fishing grounds). Amendment 11 was prepared and transmitted to NMFS for approval in parallel with the FMP for Coral Reef Ecosystems of the Western Pacific Region. This amendment prohibits the harvest of Crustacean Management Unit Species (BMUS) in the no-take marine protected areas established under the Coral Reef Ecosystems FMP. The Coral Reef Ecosystems establishes such areas around Rose Atoll in American Samoa, Kingman Reef, Jarvis Island, Howland Island, and Baker Island. No-take areas were also recommended for the NWHI, but all measures recommended in the Coral Reef Ecosystems FMP that would have applied to the waters around the NWHI (including Midway) were disapproved because of possible conflict and duplication with Executive Orders 13178 and 13196. Accordingly, NMFS issued a Record of Decision on June 14, 2002 that partially approved the Coral Reef Ecosystems FMP and Amendment 11 to the Crustaceans FMP. A final rule implementing the Coral Reef Ecosystems FMP (including Amendment 7 to the Bottomfish FMP) was published on February 24, 2004 (69 FR 8336).

Initial provisions of the Fishery Management Plan which was initially named the FMP for “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 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.

Amendment 1 became effective December 20, 1983 and adopted the State of Hawaii’s lobster fishing regulations for the federal waters around the MHI.

Amendment 2 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.

Amendment 3 revised the minimum spiny lobster size specifications for the NWHI management area, switching from a carapace length-based limit (7.7 cm) to a limit on tail width (5.0 cm).

Amendment 4, effective in March 1987, applied the existing NWHI closed areas to slipper lobsters.

Amendment 5 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.”

Amendment 6 became effective January 22, 1991 (56 FR 3071, January 28, 1991) and defined recruitment overfishing for lobster stocks in terms of reference points that are expressed in terms of the spawning potential ratio (SPR), the ratio of the spawning potential per recruit in a given area at present to that in an unfished condition. The minimum SPR threshold, below which the stock would be considered recruitment overfished, is 20%.

An emergency action was taken by NMFS to close the fishery from May 8, 1991 through August 12, 1991 (56 FR 21961, May 13, 1991 ) in response to indications that NWHI lobster stocks were approaching an overfished condition. The closure was extended until November 12, 1991 through another emergency action.

Amendment 7 became effective April 27, 1992 (57 FR 10437, March 26, 1992) and 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 in response to the indications of stock decline in 1990 and 1991. Participation was limited to 15 permits (and vessels), with permits issued according to criteria based on historical and current participation. Permits were made freely transferable, with permit renewal contingent on meeting minimum landings requirements over a two-year period. Other measures include a maximum limit on the number of traps per vessel (1,100), revisions to reporting requirements, and certain other provisions.

Amendment 8 became effective December 12, 1994 (59 FR 56004, November 10, 1994) and 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.

Amendment 9 became effective June 28, 1996 (61 FR 35145, July 5, 1996) and established a system by which the annual harvest guideline would be set based on a constant percent of the population (i.e., it is proportional to the estimated exploitable population size) that is set based on a specified acceptable risk of overfishing. Amendment 9 set this risk level at 10% (which was found through simulation results to be associated with a constant harvest rate of 13% per year) and specified that annual harvest guidelines be published by NMFS no later than February 28 of each year. Earlier in-season adjustment procedures were also eliminated. The amendment also eliminated earlier minimum size limits and prohibitions on harvesting of egg bearing females (although these must be counted against the annual harvest guideline) and provides a mechanism for certain regulatory adjustments to be made through framework procedures of the FMP.

A rule published by NMFS under Amendment 9 and effective as of June 26, 1997 (62 FR 35449, July 1, 1997) implemented a Vessel Monitoring System (VMS) program for the NWHI crustacean fishery. This rule allowed vessels with active VMS systems to remain on open lobster grounds until they are closed rather than requiring that they exit the area prior to this date. Amendment 10 addressed new requirements under the 1996 Sustainable Fisheries Act (SFA). 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 (64 FR 19067, April 19, 1999). Remaining portions that

were approved on August 5, 2003 (68 FR 46112) were provisions regarding Hawaii fishing communities, overfishing definitions, and bycatch.

Regulatory Amendment 1 to the FMP was effective July 23, 1998 - December 31, 1998 and established 1998 NWHI harvest guidelines on a bank-specific basis (Necker Island, Gardner Pinnacles, Maro Reef, and all remaining NWHI lobster fishing grounds combined).

Regulatory Amendment 2 to the FMP became effective July 2, 1999 (64 FR 36820, July 8, 1999) and made the bank-specific method of determining NWHI harvest guidelines permanent, in recognition of differences in fishing effort and recruitment in each of the four areas.

An emergency rule published by NMFS and effective July 1, 2000 through December 1, 2000 (65 FR 39314, June 26, 2000) closed the NWHI fishery as a precautionary measure to protect lobster stocks because of shortcomings in understanding the dynamics of the NWHI lobster populations, the increasing uncertainty in population model parameter estimates, and the lack of appreciable rebuilding of the lobster population despite significant reductions in fishing effort throughout the NWHI. The closure was continued through the 2001 and 2002 seasons through announcements by NMFS on February 22, 2001 (66 FR 11156), March 15, 2002 (67 FR 11678) February 21, 2003, (68 FR 8490), and March 16, 2004 (69 FR 12303) that no annual harvest guidelines for the NWHI management areas would be issued for those years. The actions were taken because of continuing uncertainty about the status and dynamics of the lobster populations and the models used to describe them.

Amendment 11 was prepared and transmitted to NMFS for approval in parallel with the FMP for Coral Reef Ecosystems of the Western Pacific Region. This amendment prohibits the harvest of Crustacean Management Unit Species (CMUS) in the no-take marine protected areas established under the Coral Reef Ecosystems FMP. The Coral Reef Ecosystems establishes such areas around Rose Atoll in American Samoa, Kingman Reef, Jarvis Island, Howland Island, and Baker Island. No-take areas were also proposed for the NWHI, but all measures proposed in the Coral Reef Ecosystems FMP that would have applied to the waters around the NWHI (including Midway) were disapproved because of possible conflict and duplication with the management regime of the NWHI Coral Reef Ecosystem Reserve. Accordingly, NMFS issued a Record of Decision on June 14, 2002 that partially approved the Coral Reef Ecosystems FMP and Amendment 11 to the Crustaceans FMP. A final rule implementing the Coral Reef Ecosystem FMP (including Amendment 11 to the Crustaceans FMP) was published on February 24, 2004 (69 FR 8336).

Amendment 12 is now being processed by NMFS and would include federal waters around the Commonwealth of the Northern Mariana Islands (CNMI) and the Pacific Remote Island Areas under the FMP.

### **6.1C Precious Corals FMP**

The precious corals FMP utilizes a combination of minimum sizes, quotas and other measures to manage potential NWHI harvests of these deep-water species (none have occurred since the

Council began managing the fishery in 1983). There are several known beds of precious corals in the NWHI and the use of non-selective gear (such as dredges or tangle nets) is prohibited in all areas.

The FMP was implemented in 1983. The plan established harvest quotas for separate beds, a minimum size limit for pink coral, gear restrictions, area restrictions and fishing seasons. The FMP has been amended four times. Amendment 1, implemented in 1988, applied the management measures of the FMP to U.S. Pacific Insular Areas other than Guam, American Samoa and the Northern Mariana Islands by incorporating them into a single exploratory permit area; expanded the managed species to include any coral of the genus *Corallium*; and outlined provisions for experimental fishing permits. Amendment 2, implemented in 1991, defined a bed as overfished with respect to recruitment when the total spawning biomass (all species combined) has been reduced to 20 percent of its unfished condition. Amendment 3, implemented in 1998, established a framework procedure for adjustment of management measures. Amendment 4, implemented in 1998, identified and described essential fish habitat for managed species of precious corals, discussed measures to minimize bycatch and bycatch mortality in the precious corals fishery and provided criteria for identifying when overfishing has occurred in the fishery.

In 2002 NMFS partially approved a regulatory amendment to the FMP which prohibited the use of non-selective gear to harvest precious corals, defined live and dead corals, established minimum size limits for live pink and black corals, and suspended the harvest of gold coral at Makapu'u Bed. Additional recommendations contained in the regulatory amendment would have revised the boundaries of the NWHI Brooks Bank Bed and reduced its harvest quota for pink coral as well as suspending its quota for gold coral, designate a newly discovered bed at French Frigate Shoals (Gold Pinnacle Bed) as a conditional bed and implement a zero harvest quota for all precious corals at this bed. These recommendations were disapproved by NMFS as inconsistent with Executive Orders 13178 and 13196.

Amendment 5 was prepared and transmitted to NMFS for approval in parallel with the FMP for Coral Reef Ecosystems of the Western Pacific Region. This amendment prohibits the harvest of Coral Reef Ecosystems Management Unit Species (BMUS) in the no-take marine protected areas established under the Coral Reef Ecosystems FMP. The Coral Reef Ecosystems establishes such areas around Rose Atoll in American Samoa, Kingman Reef, Jarvis Island, Howland Island, and Baker Island. No-take areas were also recommended for the NWHI, but all measures recommended in the Coral Reef Ecosystems FMP that would have applied to the waters around the NWHI (including Midway) were disapproved because of possible conflict and duplication with Executive Orders 13178 and 13196. Accordingly, NMFS issued a Record of Decision on June 14, 2002 that partially approved the Coral Reef Ecosystems FMP and Amendment 5 to the Precious Corals FMP. A final rule implementing the Coral Reef Ecosystems FMP (including Amendment 5 to the Precious Corals FMP) was published on February 24, 2004 (69 FR 8336).

The Fishery Management Plan for the Precious Corals Fisheries of the Western Pacific Region was implemented in September 1983 (48 FR 39229). It established the plan's management unit species and management area, as well as classifying several known beds.

Amendment 1 to the FMP became effective July 21, 1988 (50 FR 27519) and applied the management measures of the FMP to the Pacific Remote Island Areas (Palmyra and Johnston Atolls, and Wake, Kingman, Jarvis, Baker, and Howland Islands) 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.

Amendment 2 to the FMP became effective January 22, 1991 (56 FR 3072, January 28, 1991) and defined overfishing for Established beds as follows: 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*.

Amendment 3 to the FMP became effective November 18, 1998 (63 FR 55809, October 19, 1998) and established a framework procedure for adjusting management measures in the fishery. Framework Measure 1 to the FMP became effective April 17, 2002 (67 FR 11941, March 18, 2002) and 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. The framework measure included additional proposed measures that would have applied only to the NWHI, but they were not approved because they were determined to be inconsistent with the management regime of the NWHI Coral Reef Ecosystem Reserve.

Amendment 4 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 (64 FR 19067, April 19, 1999). Remaining portions that were approved on August 5, 2003 (68 FR 46112) were provisions regarding Hawaii fishing communities.

Amendment 5 to the FMP was prepared and transmitted to NMFS for approval in parallel with the FMP for Coral Reef Ecosystems of the Western Pacific Region. This amendment prohibits the harvest of Precious Coral Management Unit Species in the no-take marine protected areas established under the Coral Reef Ecosystems FMP. The Coral Reef Ecosystems establishes such areas around Rose Atoll in American Samoa, Kingman Reef, Jarvis Island, Howland Island, and Baker Island. No-take areas were also proposed for the NWHI, but all measures proposed in the Coral Reef Ecosystems FMP that would have applied to the waters around the NWHI (including Midway) were disapproved because of possible conflict and duplication with the management

regime of the NWHI Coral Reef Ecosystem Reserve. Accordingly, NMFS issued a Record of Decision on June 14, 2002 that partially approved the Coral Reef Ecosystems FMP and Amendment 5 to the Precious Corals FMP. A final rule implementing the Coral Reef Ecosystem FMP (including Amendment 5 to the Precious Corals FMP) was published on February 24, 2004 (69 FR 8336).

Amendment 6 is now being processed by NMFS and would include the federal waters around the Commonwealth of the Northern Mariana Islands (CNMI) within the FMP's management area.

#### **6.1D Coral Reef Ecosystems FMP**

This FMP was developed to manage coral reef ecosystem associated species but was only partially implemented by NMFS. Those measures that would apply to the NWHI were disapproved as potentially in conflict with the NWHI Reserve established by President Clinton as a precursor to sanctuary designation.

The Council completed the Fishery Management Plan for Coral Reef Ecosystems of the Western Pacific Region in October of 2001. On June 14, 2002 NMFS issued a Record of Decision that partially approved the FMP. 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 Order 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:

1. Establish 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, 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 disapproved by NMFS;
2. Establish a special permit and federal reporting system for controlling and monitoring the harvest of certain coral reef ecosystem 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 management unit species (MUS);
3. Prohibit the use of destructive and non-selective fishing gears;
4. Prohibit 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;

5. Incorporate 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;
6. Consider and take into account in management, the historical and cultural dependence of coral reef resources by indigenous people and;
7. Identify and prioritize coral reef related research needs for each island area, including socio-economic and cultural research for future potential allocation of resources.

### **6.1E Pelagics FMP**

Under the Pelagics FMP, longlining within 50 miles of the NWHI is prohibited but other types of pelagic fishing (trolling, handlining) are allowed. Drift gillnets and shark finning are prohibited.

The Fishery Management Plan for the Pelagic Fisheries of the Western Pacific Region became effective on March 23, 1987 (52 FR 5987, February 27, 1987). 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 Exclusive Economic Zone and prohibited foreign longline fishing within certain areas of the EEZ.

Amendment 1 became effective on March 1, 1991 (56 FR 9686, March 7, 1991) and defined recruitment overfishing for each PMUS. It also defined the optimum yield for PMUS as the amount of fish that can be harvested by domestic and foreign vessels in the EEZ without causing local overfishing or economic overfishing.

Amendment 2 became effective on May 26, 1991 (56 FR 24731, May 31, 1991). It implemented requirements for domestic pelagic longline fishing and transshipment vessel operators to have Federal permits, to maintain Federal fishing logbooks, and, if wishing to fish within 50 nm of the Northwestern Hawaiian Islands (NWHI), to have observers placed on board if directed by the National Marine Fisheries Service (NMFS). Amendment 2 also required longline gear to be marked with the official number of the permitted vessel, and incorporated the waters of the EEZ around the Commonwealth of the Northern Mariana Islands into the area managed under the FMP.

Amendment 3, which became effective on October 14, 1991 (56 FR 52214, October 18, 1991), created a 50 nm longline exclusion zone around the NWHI to protect endangered Hawaiian monk seals. This is a contiguous area extending 50 nm from named features in the NWHI and connected by corridors between those areas where the 50-nm-radius circles do not intersect. Amendment 3 also implemented framework provisions for establishing a mandatory observer program to collect information on interactions between longline fishing and sea turtles.

Amendment 4 was effective October 10, 1991 through April 22, 1994 (56 FR 14866, October 16, 1991). It established a three-year moratorium on new entry into the Hawaii-based domestic

longline fishery. The amendment also included provisions for establishing a mandatory vessel monitoring system for domestic longline vessels fishing in the Western Pacific Region. A final rule effective December 15, 1994 (59 FR 58789, November 15, 1994) under Amendment 4 required Hawaii-based longline vessels to carry and use a NMFS-owned vessel monitoring system (VMS) transmitter to ensure that they do not fish within prohibited areas.

Amendment 5 became effective on March 2, 1992 (57 FR 7661, March 4, 1992) and 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. The zones were designed primarily to prevent gear conflicts and vessel safety issues arising from interactions between longline vessels and smaller fishing boats. 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.

Amendment 6, which became effective on November 27, 1992 (57 FR 48564, October 27, 1992) 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.

Amendment 7 became effective on June 24, 1994 (59 FR 26979, May 25, 1994). It instituted a limited entry program for the Hawaii-based domestic longline fishery with transferable permits, a limit of 164 vessels, and a maximum vessel size of 101' in length overall.

Amendment 8 addressed new requirements under the 1996 Sustainable Fisheries Act (SFA). Portions of the amendment that were immediately approved included designations of essential fish habitat and descriptions of some fishing communities. Those provisions became effective on February 3, 1999 (64 FR 19067, April 19, 1999). Remaining portions that were approved on August 5, 2003 (68 FR 46112) were provisions regarding Hawaii fishing communities, overfishing definitions, and bycatch.

In August 2000, the State of Hawaii enacted a law prohibiting the retention or landing of shark fins without their associated carcasses (a practice called "finning"). Effective March 13, 2002 the Magnuson-Stevens Fishery Conservation and Management Act was amended with a similar nation-wide prohibition (67 FR 6194, February 11, 2002).

Framework Measure 1 became effective March 1, 2002 (67 FR 4369, January 30, 2002 ) and established an area seaward of 3 nm out to approximately 50 nm around the islands of American Samoa in which fishing for PMUS is prohibited by vessels greater than 50' in length overall that did not land PMUS in American Samoa under a Federal longline general permit prior to November 13, 1997.



Framework Measure 2 became effective June 13, 2002 (67 FR 34408, May 14, 2002) and incorporated the terms and conditions of a November 28, 2000 Biological Opinion issued by the US Fish and Wildlife Service under section 7 of the Endangered Species Act. These measures required Hawaii-based pelagic longline vessel operators to use blue-dyed bait, strategic offal discards, and line shooters with weighted branch lines to mitigate seabird interactions when fishing north of 23° N. Also included was a requirement that all Hawaii-based longline vessel owners and operators annually attend a protected species workshop conducted by NMFS.

Regulatory Amendment 1 to the FMP became effective June 9, 2002 (67 FR 40232, June 12, 2002) and incorporated the reasonable and prudent alternative of a March 2001 Biological Opinion issued by NMFS under section 7 of the Endangered Species Act (this followed and superseded a series of emergency and interim rules issued by NMFS between December 2000 and December 2002 which arose out of litigation activities and are not itemized here). To mitigate interactions with sea turtles, this amendment prohibited shallow set pelagic longlining north of the equator by vessels managed under the FMP and closed waters between 0° and 15° N from April through May of each year to longline fishing. It also instituted sea turtle handling requirements for all vessels using hooks to target pelagic species in the region's EEZ waters. It also extended the protected species workshop requirement to include the operators of vessels registered to longline general permits.

Regulatory Amendment 2 to the FMP became effective October 4, 2002 (67 FR 59813, September 24, 2002) and 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.

Amendment 10 was prepared and transmitted to NMFS for approval in parallel with the FMP for Coral Reef Ecosystems of the Western Pacific Region. This amendment prohibits the harvest of Pelagic Management Unit Species (PMUS) in the no-take marine protected areas established under the Coral Reef Ecosystems FMP. The Coral Reef Ecosystems establishes such areas around Rose Atoll in American Samoa, Kingman Reef, Jarvis Island, Howland Island, and Baker Island. No-take areas were also proposed for the NWHI, but all measures proposed in the Coral Reef Ecosystems FMP that would have applied to the waters around the NWHI (including Midway) were disapproved because of possible conflict and duplication with the management regime of the NWHI Coral Reef Ecosystem Reserve. Accordingly, NMFS issued a Record of Decision on June 14, 2002 that partially approved the Coral Reef Ecosystems FMP and Amendment 10 to the Pelagics FMP. A final rule implementing the Coral Reef Ecosystem FMP (including Amendment 10 to the Pelagics FMP) was published on February 24, 2004 (69 FR 8336).

Regulatory Amendment 3 implements management measures for the longline fisheries managed under the Pelagic FMP, with the objective of achieving optimum yield from these fisheries, without being likely to jeopardize the long term existence of sea turtles and other listed species. The amendment established a limited model shallow-set swordfish fishery using circle hooks with mackerel bait. This hook and bait combination has been found to reduce interactions with

leatherback and loggerhead turtles by 67% and 92% respectively in the U.S. Atlantic longline fishery. Fishing effort in the model shallow-set swordfish fishery is limited, in the first instance, to 50% of the 1994-1999 annual average number of sets, or just over 2,100 sets, allocated between those fishermen applying to participate in the fishery. As an additional safeguard a 'hard' limit on the number of leatherback (16) and loggerhead (17) turtles that could be taken by the swordfish fishery. In addition the amendment includes a number of conservation projects to protect sea turtles in their nesting and coastal habitats.

Amendment 9, under development since early 2000, would manage the harvest and retention of sharks in the Hawaii-based longline fishery. A version of the amendment was submitted to NMFS prior to the national ban on shark finning, however it is now being re-drafted in the context of that ban and the preliminarily preferred measure is to establish a landing limit of one non-blue shark per trip. The amendment would also implement a definition of bottom-set longline gear as a fishing gear distinct from pelagic longline gear.

Amendment 11 is would establish a limited access system for pelagic longlining in EEZ waters around American Samoa with initial entry criteria based on historical participation in the fishery. A proposed rule to implement Amendment 11 was published on July 22, 2004 (69 FR 43789).

Regulatory Amendment 4 includes a range of measures to minimize interactions with turtles by non-Hawaii based domestic longline vessels operating in the Western Pacific under general longline permits. Under this amendment, vessels with longline general permits making shallow sets north of the equator are required to use 18/0 circle hooks with mackerel-type bait and dehookers to release any accidentally caught turtles. The amendment also requires both operators and owners of vessels with general longline permits to annually attend protected species training workshops. Further, operators of vessels with general longline permits are required to carry and use specific mitigation gear to aid in the release of sea turtles accidentally hooked or entangled by longlines. These include dipnets, long-handled line clippers and bolt cutters (with allowances for boats with < 3' freeboard). This regulatory amendment also requires operators of non-longline pelagic vessels (e.g., trollers and handliners) to follow handling guidelines and remove trailing gear wherever they fish. This amendment is now being processed by NMFS.

## **6.2 Alternative 1B: Reserve Status Quo (No Action B)**

Under this alternative, NWHI fisheries would be conducted according to the existing management measures of the above Fishery Management Plans as well as the following non-regulatory measures in place for waters between 3 and 50 miles from emergent NWHI lands which were established by Executive Order 13178 and subsequently amended by Executive Order 13196 as follow:

### **6.2A Executive Order 13178**

**Sec. 7. Protection and Conservation Measures.** The conservation measures in this section apply throughout the Reserve.

(a) (1) *Commercial Fishing*. All currently existing commercial Federal fishing permits and current levels of fishing effort and take, as determined by the Secretary and pursuant to regulations in effect on the date of this order, shall be capped as follows:

(A) No commercial fishing may occur in Reserve Preservation Areas pursuant to section 8 of this order;

(B) There shall be no increase in the number of permits of any particular type of fishing (such as for bottomfishing) beyond the number of permits of that type in effect the year preceding the date of this order;

(C) The annual level of aggregate take under all permits of any particular type of fishing may not exceed the aggregate level of take under all permits of that type of fishing in the years preceding the date of this order, as determined by the Secretary, provided that the Secretary shall equitably divide the aggregate level into individual levels per permit, and further provided that the Secretary may make a one-time reasonable increase to the total aggregate to allow for the use of two Native Hawaiian bottomfishing permits;

(D) There shall be no permits issued for any particular type of fishing for which there were no permits issued in the year preceding the date of this order; and

(E) The type of fishing gear used by any permit holder may not be changed except with the permission of the Secretary, as provided under paragraph 3 of this section.

(2) *Recreational Fishing*. All currently existing (preceding the date of this order) levels of recreational fishing effort, as determined by the Secretary and pursuant to regulations in effect on the day of this order, shall be capped (i.e., no increase of take levels or levels of fishing effort, species targeted, or change in gear types) throughout the Reserve. However, fishing is further restricted as provided in section 8 of this order.

(3) The Secretary, after consultation with the Secretary of the Interior and Governor of the State of Hawaii, and after public review and comment and consideration of any advice or recommendations of the Reserve Council and Western Pacific Regional Fishery Management Council, may further restrict the fishing activities under subparagraphs (a)(1) and (a)(2) of this section if necessary to protect Reserve resources, or may authorize or require alternate gear types if such gear would offer equal or greater protection for Reserve resources.

(b) In addition to the conservation measures in paragraph (a) of this section, the following activities are prohibited throughout the Reserve:

(1) Exploring for, developing, or producing oil, gas, or minerals;

(2) Having a vessel anchored on any living or dead coral with an anchor, an anchor chain, or an anchor rope when visibility is such that the seabed can be seen;

(3) Drilling into, dredging, or otherwise altering the seabed; or constructing, placing, or abandoning any structure, material, or other matter on the seabed, except as an incidental result of anchoring vessels;

(4) Discharging or depositing any material or other matter into the Reserve, or discharging or depositing any material or other matter outside the Reserve that subsequently enters the Reserve and injures any resource of the Reserve, except fish parts (i.e., chumming material or bait) used in and during authorized fishing operations, or discharges incidental to vessel use such as deck wash, approved marine sanitation device effluent, cooling water, and engine exhaust; and

(5) Removal, moving, taking, harvesting, or damaging any living or nonliving Reserve resources, except as provided under paragraph (a) of this section

and sections 8(a) and 9 of this order.

c) The Secretary may conduct, or authorize by permit the activities listed in subparagraphs (b)(3)-(5) of this section to the extent that they are necessary for research, monitoring, education, or management activities that further the Management Principles of section 4 of this order.

**Sec. 8. Reserve Preservation Areas.**

(a) To further protect Reserve resources, the following areas are hereby established as Reserve Preservation Areas until some or all are made permanent after adequate public review and comment, within which all activities referred to in paragraph (b) of this section are prohibited.

(1) From the seaward boundary of Hawaii State waters and submerged lands to a mean depth of 100 fathoms (fm) around:

(A) Nihoa Island, provided that bottomfishing in accordance with the requirements of section 7(a)(1) of this order shall be allowed to continue seaward of a mean depth of 10fm, unless and until the Secretary determines otherwise after adequate public review and comment;

(B) Necker Island, provided that bottomfishing in accordance with the requirements of section 7(a)(1) of this order shall be allowed to continue seaward of a mean depth of 20fm, unless and until the Secretary determines otherwise after adequate public review and comment;

(C) French Frigate Shoals;

(D) Gardner Pinnacles, provided that bottomfishing in accordance with the requirements of section 7(a)(1) of this order shall be allowed to continue seaward of a mean depth of 10fm, unless and until the Secretary determines otherwise after adequate public review and comment;

(E) Maro Reef, provided that bottomfishing in accordance with the requirements of section 7(a)(1) of this order shall be allowed to continue seaward of a mean depth of 20fm, unless and until the Secretary determines otherwise after adequate public review and comment;

(F) Laysan Island, provided that bottomfishing in accordance with the requirements of section 7(a)(1) of this order shall be allowed to continue seaward of a mean depth of 50fm, unless and until the Secretary determines otherwise after adequate public review and comment;

(G) Lisianski Island, provided that bottomfishing in accordance with the requirements of section 7(a)(1) of this order shall be allowed to continue seaward of a mean depth of 50fm, unless and until the Secretary determines otherwise after adequate public review and comment;

(H) Pearl and Hermes Atoll; and

(I) Kure Island.

(2) Twelve nautical miles around the approximate geographical centers of:

(A) The first bank immediately east of French Frigate Shoals;

(B) Southeast Brooks Bank, which is the first bank immediately west of French Frigate Shoals, provided that the closure area shall not be closer than approximately 3nm of the next bank immediately west;

(C) St. Rogatien Bank, provided that the closure area shall not be closer than approximately 3nm of the next bank immediately east, provided further that bottomfishing in accordance with the requirements of section 7(a)(1) of this order shall be allowed to continue, unless and until the Secretary determines otherwise after adequate public review and comment;

(D) The first bank west of St. Rogatien Bank, east of Gardner Pinnacles;

(E) Raita Bank; and

(F) Pioneer Bank, provided that bottomfishing in accordance with the requirements of section 7(a)(1) of this order shall be allowed to continue, unless and until the Secretary determines otherwise after adequate public review and comment.

(b) Activities Prohibited Within Reserve Preservation Areas.

(1) In addition to the conservation measures in section 7 of this order, which are applicable to the entire Reserve, the following activities are prohibited within the Reserve Preservation Areas listed in paragraph (a) of this section, except as expressly otherwise stated in this paragraph and sections (8)(a) and 9 of this order:

(A) Commercial and recreational fishing;

(B) Anchoring in any area that contains available mooring buoys, or anchoring outside an available anchoring area when such area has been designated by the Secretary;

(C) Any type of touching or taking of living or dead coral;

(D) Discharging or depositing any material or other matter except cooling water or engine exhaust; and

(E) Such other activities that the Secretary identifies after adequate public review and comment, and after consideration of any advice and recommendations of the Reserve Council.

(2) Notwithstanding the prohibitions in this paragraph, the Secretary may conduct, or authorize by permit, research, monitoring, education, or management activities within any Reserve Preservation Area that further the Management Principles of section 4 of this order.

(3) The Reserve Preservation Areas in this section are approximated using fathoms. The Secretary will develop straight line boundaries based on longitude and latitude coordinates to encompass each Reserve Preservation Area, to provide for clarity and ease of identification. The Secretary may make technical modifications to any such boundaries.

**Sec. 9. Native Hawaiian Uses.** Native Hawaiian noncommercial subsistence, cultural, or religious uses may continue, to the extent consistent with existing law, within the Reserve and Reserve Preservation Areas identified under section 8 of this order. The Secretary shall work with Native Hawaiian interests to identify those areas where such Native Hawaiian uses of the Reserve's resources may be conducted without injury to the Reserve's coral reef ecosystem and related marine resources and species, and may revise the areas where such activities may occur after public review and comment, and consideration of any advice and recommendations of the Reserve Council.

## **6.2B Executive Order 13196**

**Sec. 3. Amendments to Sections 7 of Executive Order 13178.**

1. Section 7(a)(1) of Executive Order 13178 is hereby amended by revising the first sentence to read as follows:

“Commercial Fishing. All currently existing commercial Federal fishing permits and current levels of fishing effort and take, which also includes the non-permitted level of trolling for pelagic species by currently permitted bottom fishers, as determined by the Secretary and pursuant to regulations in effect on December 4, 2000, shall be capped as follows:”

2. Section 7(a)(1)(C) of Executive Order 13178 is hereby revised to read as follows:

“(C) The annual level of aggregate take under all permits of any particular type of fishing may not exceed the aggregate level of take under all permits of that type of fishing as follows:

(1) Bottomfishing—the annual aggregate level for each permitted bottomfisher shall be that permittee’s individual average taken over the 5 years preceding December 4, 2000, as determined by the Secretary, provided that the Secretary, in furtherance of the principles of the reserve, may make a onetime reasonable increase to the total aggregate to allow for the use of two Native Hawaiian bottomfishing permits;

(2) All other commercial fishing—the annual aggregate level shall be the permittee’s individual take in the year preceding December 4, 2000, as determined by the Secretary.”

3. A new section 7(a)(1)(F) is hereby added to Executive Order 13178 and reads as follows:

“(F) Trolling for pelagic species shall be capped based on reported landings for the year preceding December 4, 2000.”

4. Section 7(b)(4) is revised to read as follows:

“(4) Discharging or depositing any material or other matter into the Reserve, or discharging or depositing any material or other matter outside the Reserve that subsequently enters the Reserve and injures any resource of the Reserve, except:

(A) fish parts (i.e., chumming materia or bait) used in and during fishing operations authorized under this order;

(B) biodegradable effluent incident to vessel use and generated by a marine sanitation device in accordance with section 312 of the Federal Water Pollution Control Act, as amended;

(C) water generated by routine vessel operations (e.g., deck wash down and graywater as defined in section 312 of the Federal Water Pollution Control Act), excluding oily wastes from bilge pumping; or (D) cooling water from vessels or engine exhaust; and”.

**Sec. 4. Amendments to Sections 8 of Executive Order 13178.**

1. Section 8 of Executive Order 13178 is modified by substituting “provided that commercial bottomfishing and commercial and recreational trolling for pelagic species in accordance with the requirements of sections 7(a)(1) and 7(a)(2) of this order, respectively,” for “provided that bottomfishing in accordance with the requirements of section 7(a)(1)” everywhere the latter phrase appears in section 8.

2. Section 8(a)(1)(A) is modified by substituting “a mean depth of 25 fm” for “a mean depth of 10fm.”

3. Section 8(a)(1)(B) is modified by substituting “a mean depth of 25 fm” for “a mean depth of 20fm.”

4. Section 8(a)(1)(D) is modified by substituting “a mean depth of 25 fm” for “a mean depth of 10fm.”

5. Section 8(a)(1)(E) is modified by substituting “a mean depth of 25 fm” for “a mean depth of 20fm.”

6. Section 8(a)(1)(G) is modified by substituting “a mean depth of 25 fm” for “a mean depth of 50fm.”

7. Section 8(a)(1)(I) is revised to read “Kure Atoll.”

8. Sections 8(a)(2)(D) and (E) are hereby deleted and a new section 8(a)(3) is hereby substituted as follows:

“(3) Twelve nautical miles around the approximate geographical centers of

(A) The first bank west of St. Rogation Bank, east of Gardner Pinnacles, provided that commercial bottomfishing and commercial and recreational trolling for pelagic species in

accordance with the requirements of sections 7(a)(1) and 7(a)(2) of this order, shall be allowed to continue for a period of 5 years from the date of this order; and

(B) Raita Bank, provided that commercial bottomfishing and commercial and recreational trolling for pelagic species in accordance with the requirements of sections 7(a)(1) and 7(a)(2) of this order, shall be allowed to continue for a period of 5 years from the date of this order; and

(C) Provided that both banks described above in (3)(A) and (3)(B) shall only continue to allow commercial bottomfishing and commercial and recreational trolling for pelagic species after the 5-year time period if it is determined that continuation of such activities will have no adverse impact on the resources of these banks.”

### **6.3 Alternative 2: Council Recommendations to Date**

Under this alternative, NWHI fisheries would be subject to the regulatory measures now in place under the Council’s FMPs, as modified by the following additional measures that have been recommended by the Council but not processed or implemented by NMFS:

#### **6.3A Bottomfish FMP**

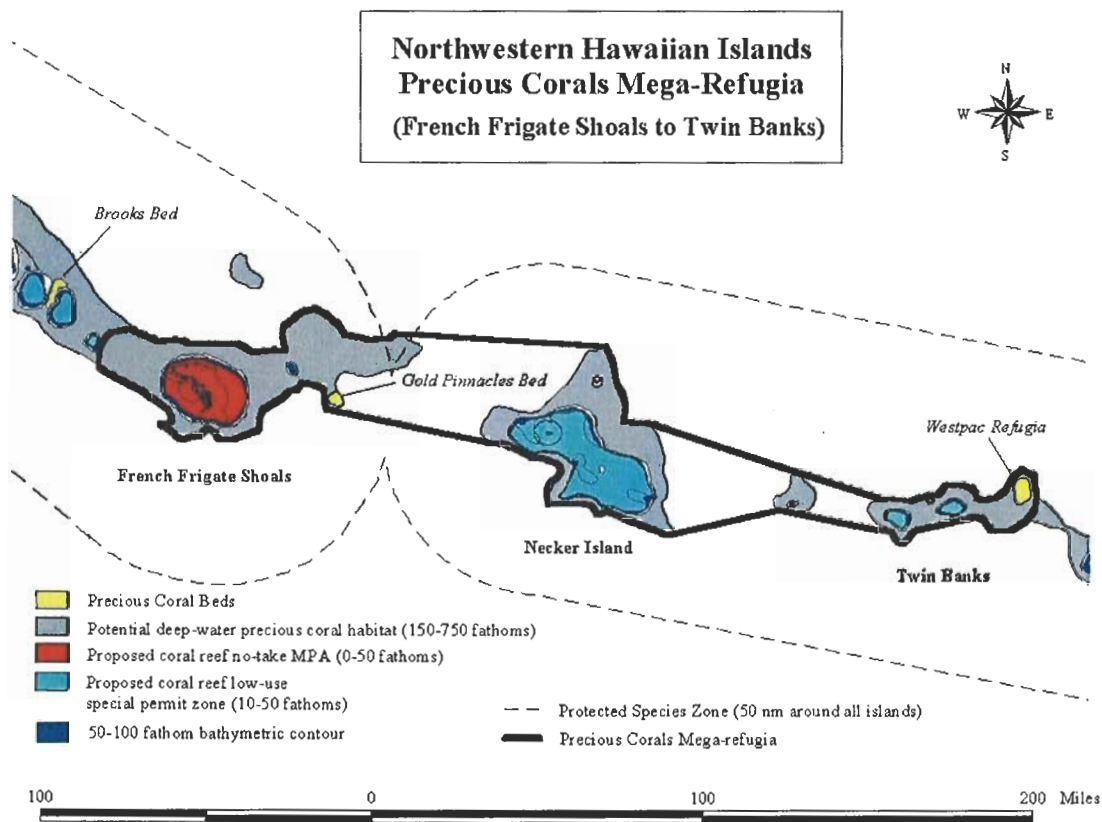
- A) Modify current NWHI limited entry permit renewal requirements by suspending the use-or-lose permit renewal landing requirements effective December 4, 2000;
- B) Establish a procedure for issuance of new Mau Zone limited access permits based on historical participation in the NWHI and MHI bottomfish fisheries;
- C) Reserve two or more NWHI limited entry permits for members of a Western Pacific Community Development Program.
- D) Establish no-take marine protected areas out to 10 fm around all NWHI and out to 50 fm around Laysan Island, French Frigate Shoals, and the northern half of Midway.

#### **6.3B Precious Corals FMP**

- A) Revise the boundaries of Brooks Bank;
- B) At Brooks Bank, revise harvest quota for pink coral to 200 kg and suspend the harvest quota for gold coral;
- C) Classify FFS-Gold Pinnacles Bed as Conditional Bed, prohibit harvest of all precious corals in bed;
- D) Remove 1,000 kg quota for Exploratory Areas;
- E) Prohibit harvest of more than 1,000 kg at any one permit area;
- F) Prohibit repeat harvesting of a site in subsequent permit years until upgraded to Conditional Bed;
- G) If using one submersible, harvest can only be every second legal coral tree. If using two submersibles, harvest can only be every third legal coral tree. Video and audio records and mothership bridge records must be submitted;
- H) Prohibit harvest of more than 1,000 kg of gold coral in a permit year in an Exploratory Area;
- I) Establish minimum harvest size for gold coral at 1.5 inches base diameter and height between 4 and 6 ft;

- J) Prohibit harvest of gold coral in NWHI;
- K) Prohibit harvest within one bed diameter of one known bed.;
- L) Require observers (if requested by NMFS and in consultation with the Council);
- M) Establish a series of no-take MPAs around NWHI (10 fm all NWHI, 50 fm Laysan, French Frigate Shoals, and northern half of Midway);
- N) Establish a NWHI precious corals mega-refugia (see Figure 1)

**Figure 1. Proposed NWHI Precious Corals Mega Refugia**





### **6.3C Crustaceans, Coral Reef Ecosystems and Pelagics FMPs**

A) Implement No-take MPAs in federal waters within the 10 fm contour around all NWHI with the exception of Laysan, French Frigate Shoals, and the northern half of Midway where No-take MPAs would be established within the 50 fm contour.

B) Implement Low-use MPAs in federal waters within the 50 fm contour around all NWHI (except where No-take MPAs exist). Any fishing for coral reef ecosystem associated species within this area would require a special permit issued by NMFS on a case-by-case basis.

### **6.4 Alternative 3: Precautionary Modification 1**

Under this alternative, NWHI fisheries would be subject to the regulatory measures now in place under the Council's FMPs as modified by the measures described in Alternative 2, plus the implementation of two additional no-take MPAs in federal waters as illustrated in Figure 3. No fishing of any type would be allowed within these areas.

### **6.5 Alternative 4: Precautionary Modification 2**

Under this alternative, NWHI fisheries would be subject to the regulatory measures now in place under the Council's FMPs as modified by the measures described in Alternative 2, plus the implementation of two additional no-take MPAs in federal waters as illustrated in Figure 4. No fishing of any type would be allowed within these areas.

### **6.6 Alternative 5: National Marine Sanctuary Program Recommendation**

Under this alternative, NWHI fisheries would be subject to the regulatory measures now in place under the Council's FMPs, as modified by the following NMSP recommendations as presented in the National Marine Sanctuaries Program's September 20, 2004 "*Proposed Northwestern Hawaiian Islands National Marine Sanctuary Advice and Recommendations on the Development of Draft Fishing Regulations Under the National Marine Sanctuaries Act 304(a)(5)*" (NMSP, 2004). The proposed sanctuary shall include submerged lands and waters of the NWHI, extending approximately 1,200 nautical miles (nm) long and 100 nm wide. The outer boundary of the Reserve would be expanded at the most northwestern extent (northwest of Kure Atoll) to include newly identified precious coral beds and monk seal foraging areas. This alternative prohibits precious coral and crustacean harvest, and pelagic longlining, but provides for limited commercial bottomfish/pelagic trolling, commercial pelagic trolling, various forms of recreational fishing, and limited Native Hawaiian cultural and subsistence uses through a permitting process. However, none of these uses could be conducted without establishing a plan to determine the ecosystem-related impacts of the fishing activities and how to avoid them. This alternative would require the development of a task force consisting of representatives from partner agencies and relevant institutions to work together to establish appropriate ecological benchmarks to measure the impact of fishing on the ecosystems of the NWHI. The task force would develop an annual aggregate level of harvest not to exceed catch levels for commercial bottomfish/pelagic trolling and commercial pelagic trolling based on recorded landings for each

fisherman operating from December 4, 1999 to December 4, 2000. During the time between sanctuary designation and the implementation of new fishery management measures based on ecological benchmarks, the sanctuary would manage fishing activities based on species specific individual fishing caps.

In addition to fishing caps, this alternative includes two Ecological Reserves (ER) and several Sanctuary Preservation Areas (SPA). One of the ERs would be established west of longitude 173.5° W, to include the area surrounding Lisianski Island and extending northwest throughout the remainder of the proposed sanctuary to 179.7° W longitude. The other ER would bracket French Frigate Shoals between longitude 165° and 167.5° W. All commercial fishing would be prohibited within the ERs. However, limited amounts of certain types of recreational and/or sustenance fishing would be allowed in each. All commercial, recreational, and sustenance fishing would be prohibited inside an SPA with the exception of the SPA located around Midway Atoll pursuant to Midway National Wildlife Refuge regulations. Sustenance fishing would be allowed by permit outside of the SPAs. The SPAs would extend out to 75 fathoms around Lisianski and Laysan Islands, and Maro Reef, and out to 100 fathoms around Kure and Pearl and Hermes Atolls. In addition, SPAs would be created out to 3 miles around Gardner Pinnacles, Midway Atoll, Necker Island, and Nihoa Island, and out to 12 miles around French Frigate Shoals and surrounding banks from the unnamed bank northwest of St. Rogatien Bank to French Frigate Shoals and the unnamed bank northeast of French Frigate Shoals. All of the SPAs would include state waters (see Figure 5).

#### **6.7 Alternative 6: Close all Federal Waters to Bottomfishing**

Under this alternative, NWHI fisheries would be subject to the regulatory measures now in place under the Council's FMPs as modified by the measures described in Alternative 2, plus a prohibition on any targeting of bottomfish or seamount groundfish in federal waters around the Northwestern and Main Hawaiian Islands (MHI).

#### **6.8 Alternative 7: Implement a Moratorium on NWHI Fishing for Lobster, Precious Coral, and Coral Reef Associated Species Until Fishery Ecosystem Management Plans are Implemented (Council Recommendation)**

The Council's recommendation for fishery management in the proposed NWHI sanctuary has four broad aspects related to fishing regulations, indigenous use, monitoring and research.

First, the Council recommends that fisheries for crustaceans, precious corals and coral reef associated species be subject to a moratorium until one or more science-based fishery ecosystem management plans for the NWHI are developed by the Council and implemented by NOAA Fisheries under the MSFCMA. Such plans would be developed by the Council in consultation with the National Marine Sanctuary Program (as well as the State of Hawaii, the U.S. Fish and Wildlife and the U.S. Coast Guard in their roles as Council members) and would fully consider the complete range of potential effects on both marine and terrestrially based NWHI resources. In the interim, fishing for bottomfish species (snappers, jacks and other groundfish) would be

managed under a limited entry system that would allow up to 17 vessels maximum to fish the entire 1,200 mile NWHI chain (10 vessels within the southerly Mau Zone and 7 vessels within the northern Ho'omalulu Zone). Each vessel's size would be limited to no more than 60 feet in length overall, the use of bottom trawls, explosives, poisons or other destructive gears would be prohibited and vessels would be subject to a federal permitting and catch reporting requirements and required to carry federal fishery observers if requested by NOAA Fisheries. Fishing for pelagic species (tuna, mahimahi, wahoo and other open ocean species) would be allowed by use of trolling or handline hook-and-line gear, with longline, trawls, purse seines, set nets and other pelagic fishing gears prohibited within a corridor that is 50 nautical miles from the geographic center of each of individual islands in the NWHI (i.e. the proposed NWHI sanctuary, see Figure 5). These pelagic fishing vessels would also be subject to federal permitting and logbook requirements. Finally, no-take marine protected areas would be implemented within federal waters from 0-10 fathoms around each emergent island or atoll as well as within federal waters 0-50 fathoms around French Frigate Shoals, Laysan Island, and the northern half of Midway Atoll. All fishing of any variety would be prohibited within these areas.

Second, the Council recommends that fishing be allowed by Native Hawaiian communities under the Council's Western Pacific Community Development Program during the development and implementation of fishery ecosystem management plans. Preferential Native Hawaiian participation would occur through the issuance of two of the ten Mau Zone bottomfishing permits under the Community Development Program as developed and recommended by the Council in 2003. Preferential subsistence use could occur as Community Development Programs are developed for other NWHI fisheries. In addition, non-preferential access would also be available to Native Hawaiians through participation in NWHI pelagic troll and handline fisheries. All permits and fisheries would be required to be consistent with applicable laws and statutes, including the no-take areas discussed here. It is likely that some or all of these interim measures would also be incorporated into any NWHI fishery ecosystem management plans.

Third, the Council recommends that fishery monitoring by NOAA's Fisheries Service continue to include the collection of both fishery dependent (e.g., logbook) data, and fishery independent (e.g., biological ecosystem dynamics and oceanographic conditions) information.

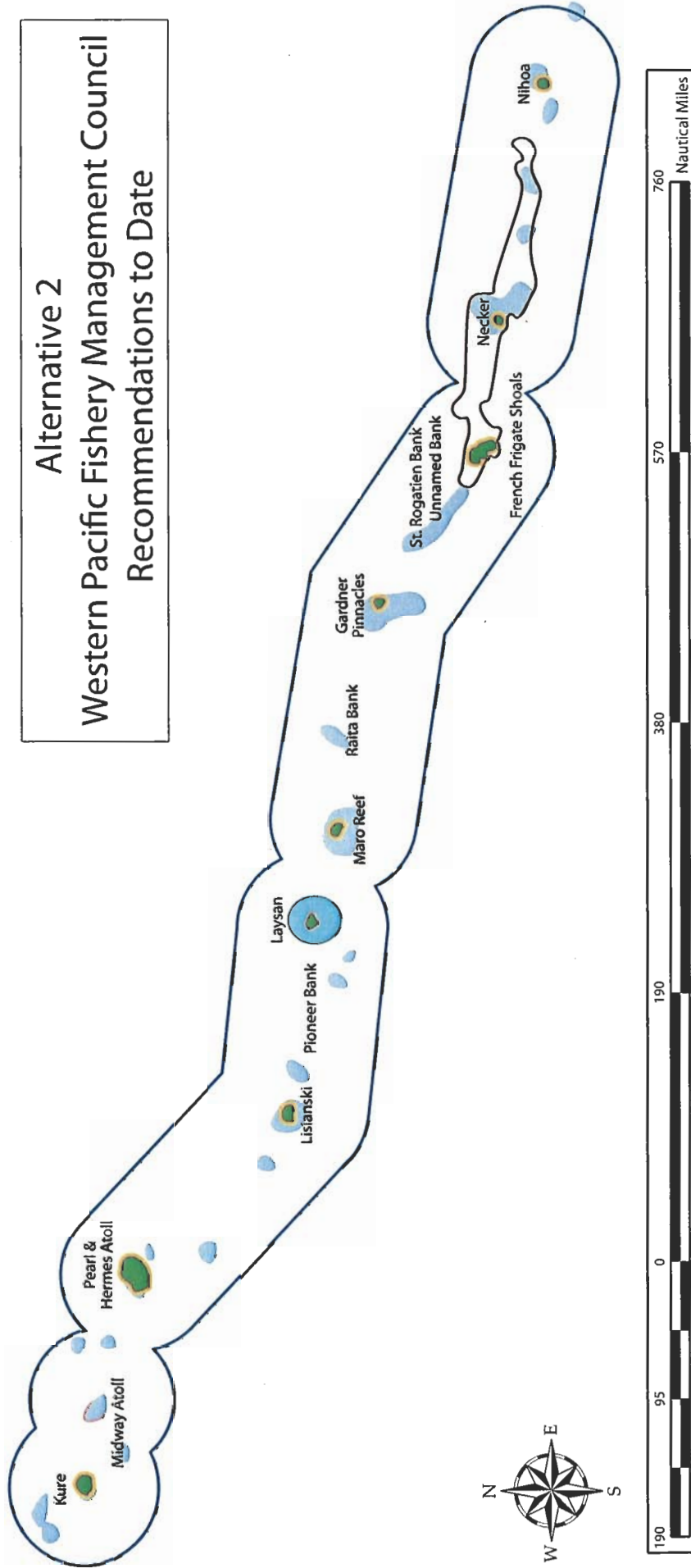
Fourth, marine research to support and refine management of NWHI fisheries and ecosystems conducted by NOAA Fisheries, the National Ocean Service, the U.S. Fish and Wildlife Service, the University of Hawaii and other research and management partners would be coordinated under the Hawaii Archipelagic Living Marine Resource Research Plan currently under development by the NOAA Fisheries' Pacific Islands Fisheries Science Center and other NWHI research and management agencies. This research would continue to be independently peer-reviewed and to provide the scientific basis for adaptive management of NWHI fisheries.

These alternatives are summarized in Table 1 and Alternatives 2-5 and 7 are illustrated in the following figures.

Table 1. Summary of Alternatives Considered

FMP	Alternative 1A FMP Status Quo	Alternative 1B Reserve Status Quo	Alternative 2 Council Recommend- ations to Date	Alternative 3 Precautionary Modification 1 (less restrictive)	Alternative 4 Precautionary Modification 2 (more restrictive)	Alternative 5 NMSP Recommend- ation	Alternative 6 Prohibit all Bottomfishing	Alternative 7 Limited fishing plus Moratoriums
Bottomfish	Limited entry, maximum vessel sizes etc.	FMP plus: sanctuary preservation area closures, caps	FMP plus: Suspend use/lose Allow MZ entry No-take/Low- use MPAs	FMP plus: Suspend use/lose Allow MZ entry No-take/Low-use MPAs New No-take MPAs	FMP plus: Suspend use/lose Allow MZ entry No-take/Low-use MPAs New No-take MPAs	FMP plus: Caps w/ratios Ecological and sanctuary preservation area closures	Close fishery	FMP plus: Suspend use/lose Allow MZ entry No-take/Low-use MPAs New No-take MPAs
Crustaceans	LE, harvest guidelines, etc.	Close fishery	FMP when science allows plus: No-take/Low- use MPAs	FMP when science allows plus: No-take/Low-use MPAs New No-take MPAs	FMP when science allows plus: No-take/Low-use MPAs New No-take MPAs	Close fishery	FMP when science allows FMP plus: No-take/Low- use MPAs	Moratorium, potential future fishing if appropriate under FEMPs
Precious Corals	Bed, size quotas etc.	Close fishery	FMP plus: Mega-refugia, no gold etc No-take/Low- use MPAs	FMP plus: Mega- refugia, no gold etc., No-take/Low-use MPAs New No-take MPAs	FMP plus: Mega-refugia, no gold etc., No- take/Low-use MPAs New No-take MPAs	Close fishery	FMP plus: Mega-refugia, no gold etc No-take/Low- use MPAs	Moratorium, potential future fishing if appropriate under FEMPs
Coral Reef Ecosystems	None	Close fishery	FMP: No- take/Low-use MPAs etc.	FMP: No-take/Low- use MPAs etc. New No-take MPAs	FMP: No-take/Low-use MPAs, etc. New No-take MPAs	Close fishery	FMP: No-take/Low- use MPAs etc.	Moratorium, potential future fishing if appropriate under FEMPs
Pelagics	Protected species zone	Some fishing, sanctuary preservation area closures	FMP plus: Low use/no take MPAs	FMP plus: No-take/Low-use MPAs, etc. New No-take MPAs	FMP plus: No-take/Low-use MPAs, etc. New No-take MPAs	Some fishing, sanctuary preservation area closures	FMP plus: No-take/Low- use MPAs	FMP plus: No-take/Low-use MPAs

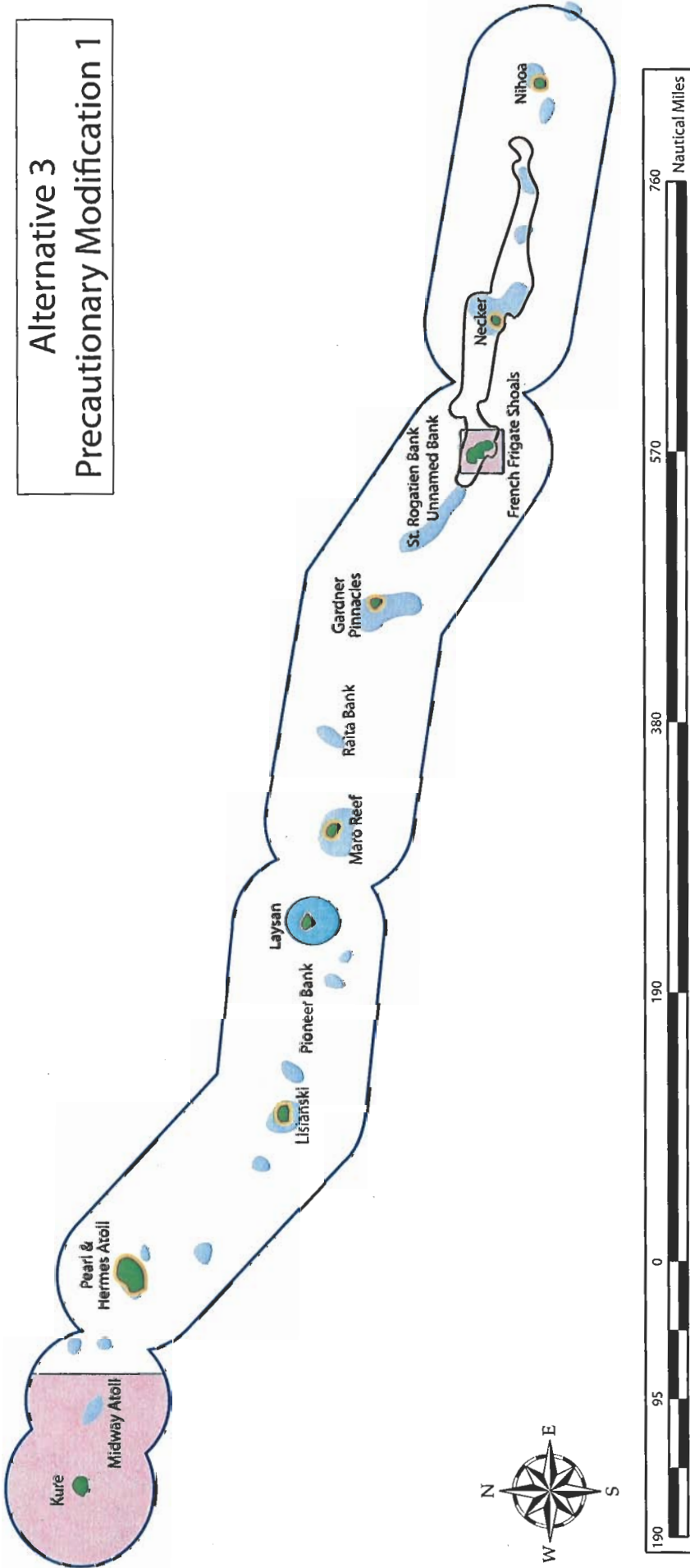
# Alternative 2 Western Pacific Fishery Management Council Recommendations to Date



- No-take lobster area (0-20 miles around Laysan and 0-10 fm federal waters around all NWHI)
  - Proposed Precious Corals Mega-Refugia
  - Proposed NWHI National Marine Sanctuary
  - Proposed Low-Use MPA
  - State Water Areas: 3mi
  - Proposed No-Take MPA
  - 0-100 fm
- No-Take MPAs would be established from 0-10 fm around each emergent island and from 0-50 fm around Laysan, FFS and the northern half of Midway. In addition, Low-Use MPAs would be established from 10-50 fm around each emergent island. All MPAs would apply only in Federal waters
- Map not drawn to scale
- Geographic Data Projected in WGS 1984  
Overlay on NOAA Nautical Chart  
Not for Navigational Use  
Created 2/2/2005

# Alternative 3

## Precautionary Modification 1



French Frigate Shoals Closed Area:  
 North along 24 deg lat  
 West along -166.5 deg long  
 South along 23.5 deg lat  
 East along -166 deg long

Federal Waters Closed Area:  
 West of -177 Degrees Longitude

Proposed No-Take Areas  
 Proposed Precious Corals Mega-Refugia  
 No-take lobster area (0-20 miles around Laysan and 0-10 fm federal waters around all NWHI)  
 State Water Areas: 3mi

Proposed NWHI  
 National Marine Sanctuary  
 0-100 fm  
 Proposed Low-Use MPA  
 Proposed No-Take MPA

Geographic Data Projected in WGS 1984  
 Overlay on NOAA Nautical Chart  
 Not for Navigational Use  
 Created 1/5/2005

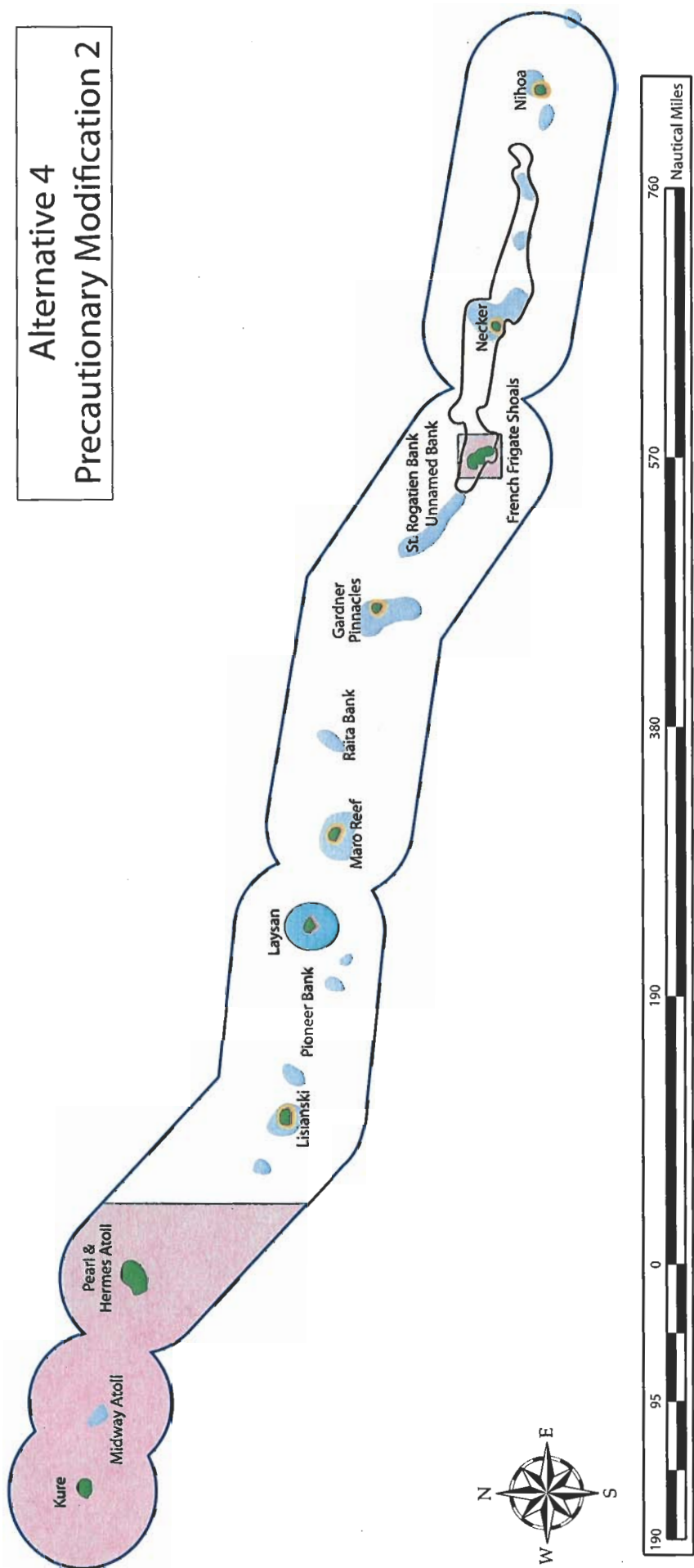
Map not drawn to scale

No-Take MPAs would be established from 0-10 fm around each emergent island and from 0-50 fm around Laysan. In addition, Low-Use MPAs would be established from 10-50 fm around each emergent island. All MPAs would apply only in Federal waters.



## Alternative 4

### Precautionary Modification 2



Geographic Data Projected in WGS 1984  
Overlay on NOAA Nautical Chart  
Not for Navigational Use  
Created 1/5/2005

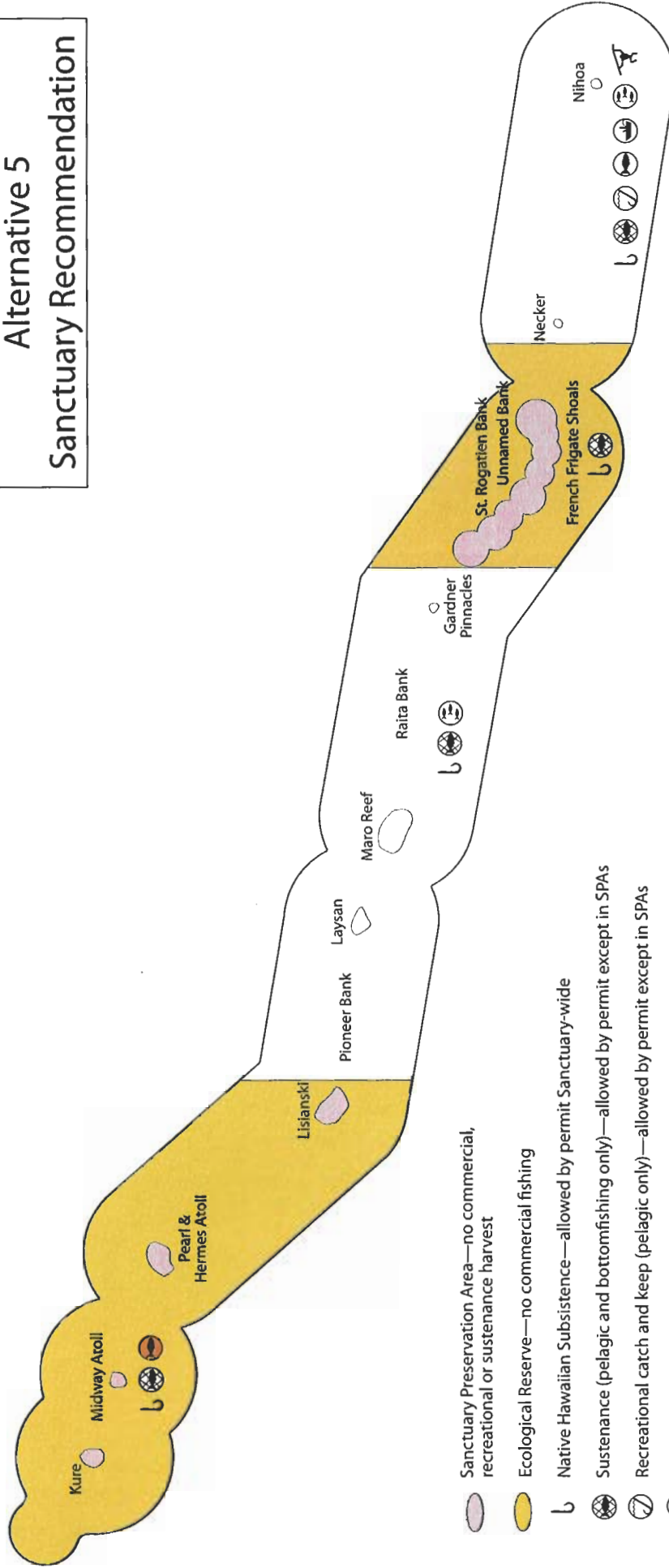
- Proposed No-Take Areas
- Proposed Precious Corals Mega-Refugia
- No-take lobster area (0-20 miles around Laysan and 0-10 fm federal waters around all NWHI)
- State Water Areas: 3mi
- Proposed NWHL National Marine Sanctuary
- 0-100 fm
- Proposed Low-Use MPA
- Proposed No-Take MPA

Map not drawn to scale

No-Take MPAs would be established from 0-10 fm around each emergent island and from 0-50 fm around Laysan. In addition, Low-Use MPAs would be established from 10-50 fm around each emergent island. All MPAs would apply only in Federal waters.

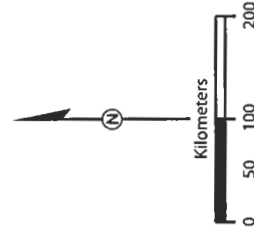
French Frigate Shoals Closed Area:  
North along 24 deg lat  
West of -174 Degrees Longitude  
South along 23.5 deg lat  
East along -166 deg long

# Alternative 5 Sanctuary Recommendation



- Sanctuary Preservation Area—no commercial, recreational or sustenance harvest
- Ecological Reserve—no commercial fishing
- Native Hawaiian Subsistence—allowed by permit Sanctuary-wide
- Sustenance (pelagic and bottomfishing only)—allowed by permit except in SPAs
- Recreational catch and keep (pelagic only)—allowed by permit except in SPAs
- Recreational catch and release (pelagic and Caranx and Seriola genera only)—allowed by permit except in SPAs
- Recreational catch and release (pelagic and Caranx and Seriola genera only)—conditionally allowed by permit, except in SPAs and Midway, consistent with FWS regulations
- Commercial pelagic (non long-line)—allowed by permit except in SPAs
- Commercial bottomfish—allowed by permit except in SPAs
- Recreational spearfishing for pelagic only (non-SCUBA)—allowed by permit except in SPAs

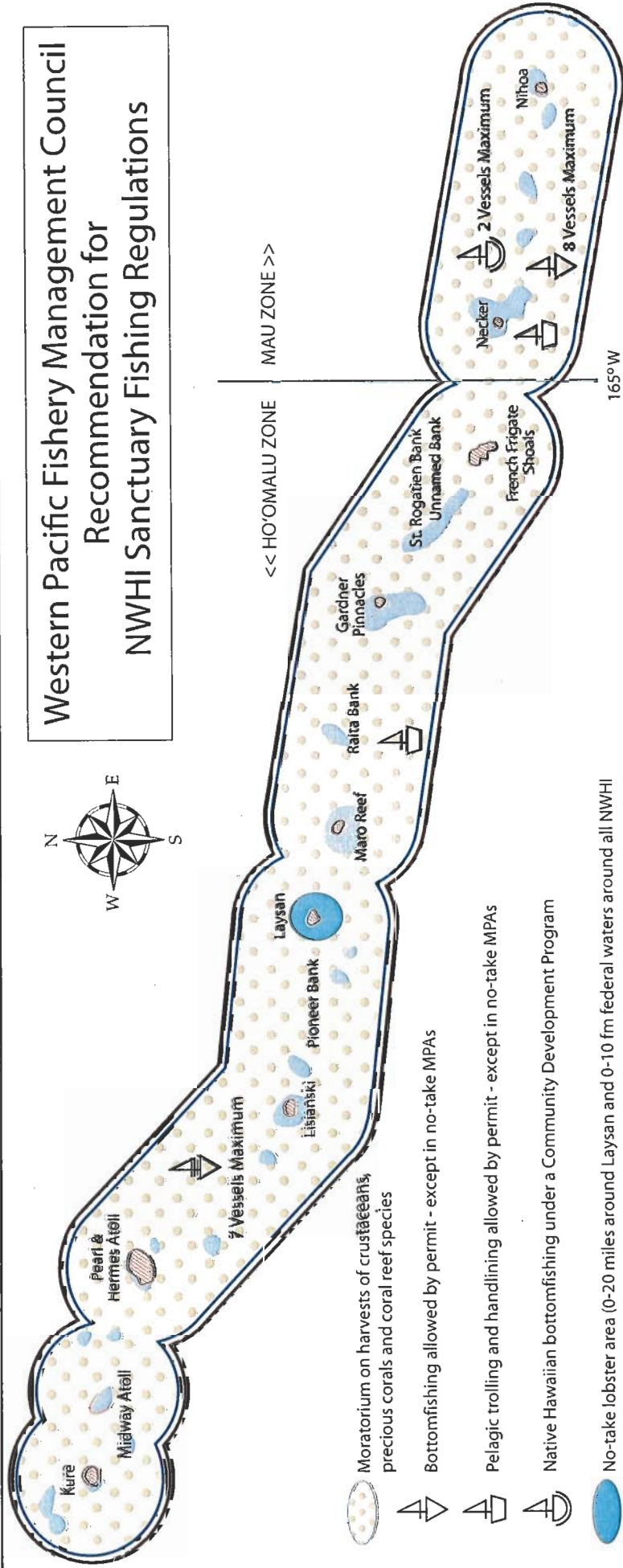
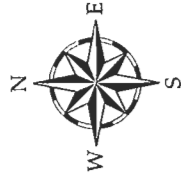
Note: All harvest of crustacean, coral and coral resources (e.g., aquaria live rock, sponges, etc.) are prohibited Sanctuary-wide.



Map not drawn to scale



# Western Pacific Fishery Management Council Recommendation for NWHI Sanctuary Fishing Regulations



Moratorium on harvests of crustaceans, precious corals and coral reef species

Bottomfishing allowed by permit - except in no-take MPAs

Pelagic trolling and handlining allowed by permit - except in no-take MPAs

Native Hawaiian bottomfishing under a Community Development Program

No-take lobster area (0-20 miles around Laysan and 0-10 fm federal waters around all NWHI)

Proposed NWHI National Marine Sanctuary

Longline Prohibited Area

State Water Areas: 3mi

No-Take MPA

0-100 fm

**Notes:** All fishing subject to Federal permitting and reporting requirements. Longlining, drift gillnetting, bottom set nets, trawls, explosives, poisons and fish-narcotics prohibited Sanctuary-wide.

All fishing prohibited in no-take MPAs from 0-10 fm around all emergent islands and atolls, and from 0-50 fm around Laysan, French Frigate Shoals and the northern half of Midway. No-Take MPAs apply only in Federal waters.

Bottomfish vessels limited to ≤60 ft in length. Federal observers must be onboard if requested by NOAA. All vessel operators must attend NOAA Protected Species Workshops.

Harvesting of crustaceans, precious corals, and coral reef ecosystem associated species prohibited Sanctuary-wide until a science-based fishery ecosystem developed in consultation with the National Marine Sanctuary Program and NOAA Fisheries is in place. However, Native Hawaiian subsistence use would be allowed by Native Hawaiian Communities eligible under the Community Development Program except in No-Take MPAs.

Geographic Data Projected in WGS 1984  
Overlay on NOAA Nautical Chart  
Not for Navigational Use  
Created 3/18/2005

Map not drawn to scale