



**WESTERN
PACIFIC
REGIONAL
FISHERY
MANAGEMENT
COUNCIL**

**RECOMMENDATION OF THE WESTERN PACIFIC
REGIONAL FISHERY MANAGEMENT COUNCIL**

REGARDING

**THE MANAGEMENT OF FISHERIES WITHIN THE
PROPOSED NORTHWESTERN HAWAIIAN ISLANDS
NATIONAL MARINE SANCTUARY**

**INCLUDING
SUPPORTING DOCUMENTATION**

April 14, 2005

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I. INTRODUCTION

The National Marine Sanctuaries Act (NMSA) contains nine purposes and policies which articulate the need for the coordinated protection of marine areas of special national significance in order to allow long-term sustainable use by both public and private interests. This white paper provides an evaluation of the consistency of the Western Pacific Fishery Management Council's (Council) recommended fishing regulations for the proposed Northwestern Hawaiian Islands (NWHI) National Marine Sanctuary with the National Marine Sanctuaries Act's purposes and policies, as well as the National Marine Sanctuary Program's (NMSP) proposed goals and objectives for the proposed NWHI sanctuary and the National Standards of Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) as required under Section 304(a)(5) of the NMSA, which reads as follows:

The Secretary shall provide the appropriate Regional Fishery Management Council with the opportunity to prepare draft fishing regulations within the Exclusive Economic Zone as the Council may deem necessary to implement the proposed designation. Draft regulations prepared by the Council, or a Council determination that regulations are not necessary pursuant to this paragraph, shall be accepted and issued as proposed regulations by the Secretary unless the Secretary finds that the Council's action fails to fulfill the purposes and policies of this chapter and the goals and objectives of the proposed designation. In preparing the draft regulations, a Regional Fishery Management Council shall use as guidance the national standards of section 301(a) of the Magnuson-Stevens Act (16 U.S.C. 1851) to the extent that the standards are consistent and compatible with the goals and objectives of the proposed designation. The Secretary shall prepare the fishing regulations, if the Council declines to make a determination with respect to the need for regulations, makes a determination which is rejected by the Secretary, or fails to prepare the draft regulations in a timely manner. Any amendments to the fishing regulations shall be drafted, approved and issued in the same manner as the original regulations. The Secretary shall also cooperate with other appropriate fishery management authorities with rights and responsibilities within a proposed sanctuary at the earliest practicable stage in drafting any sanctuary fishing regulations.

The Council's recommendation was developed through a participatory and public process and is strongly grounded on the most recent scientific knowledge and new information concerning the NWHI in particular and ecosystem approaches to management in general. Appendix A to this paper provides an extensive analysis of a range of alternatives for NWHI fishery management, including the Council's recommendation and that of the NMSP as described in their September 20, 2004 "*Proposed Northwestern Hawaiian Islands National Marine Sanctuary Advice and Recommendations for Development of Draft Fishing Regulations under the National Marine Sanctuaries Act 304(a)(5)*" (NMSP 2004).

II. DESCRIPTION OF THE COUNCIL'S 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. These latter two aspects are non-regulatory, however they are discussed here because 1) they are an essential part of any rational fishery management program and, 2) they meet many of the non-regulatory purposes and policies of the NMSA and the proposed goals and objectives for the proposed NWHI sanctuary.

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 map below). 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 from 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 (see Appendix B to this paper).

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 one or more fishery ecosystem management plans that include the NWHI. 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

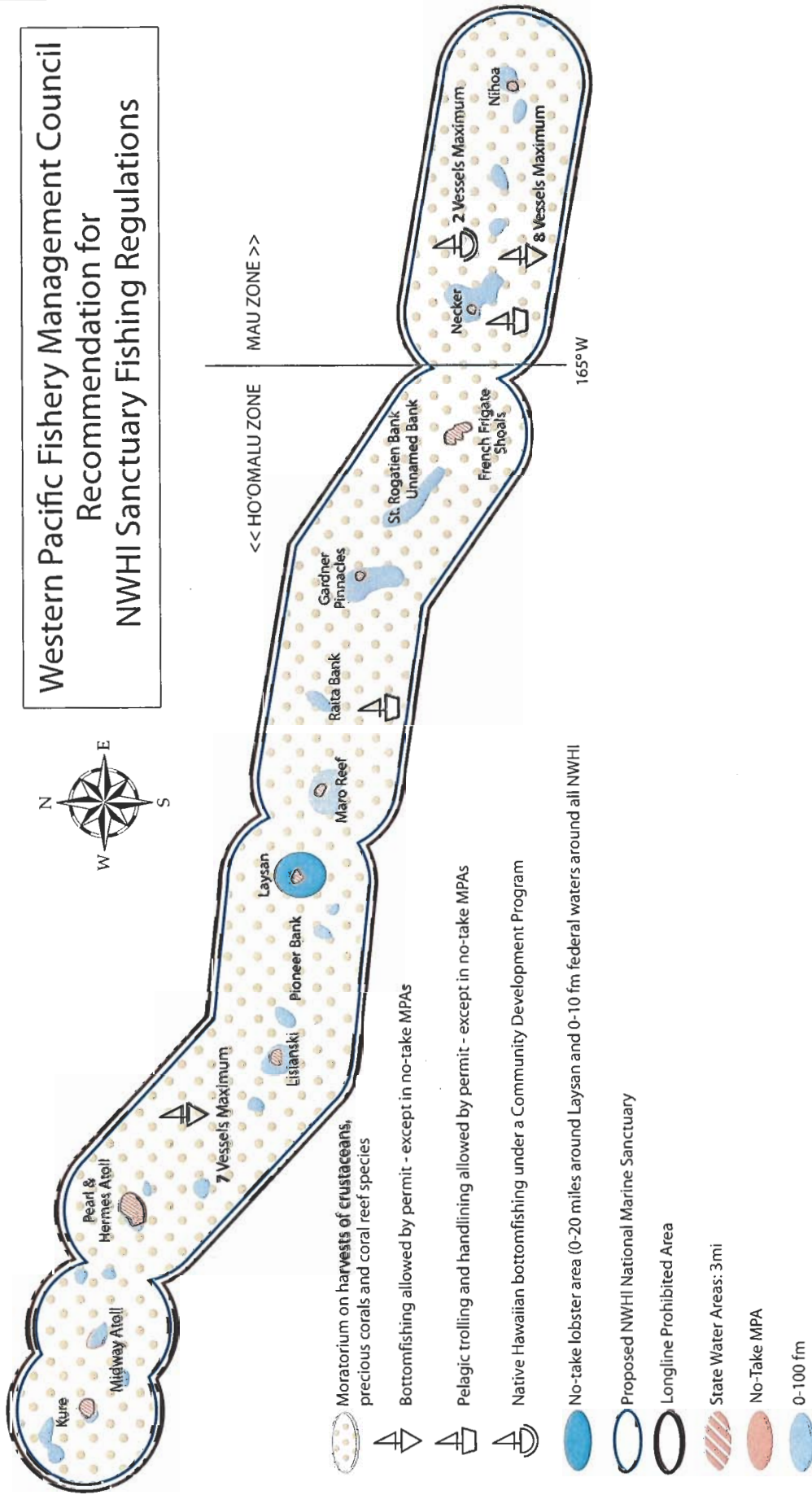
applicable laws, including the no-take areas discussed here. It is likely that some or all of these interim measures would also be incorporated into any NWHI fishery ecosystem management plans (see Appendix B).

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 that is conducted by NOAA Fisheries and 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.

The Council's recommendation is intended to protect, restore and enhance the resources of the proposed sanctuary, maintain the health of the ecosystems and natural assemblages of living resources for future generations, provide places for species dependent on such living resources to survive and propagate, and achieve the goals and objectives of the Sanctuary and the purposes and policies of the National Marine Sanctuaries Act. The Council's recommendation represents a strong conservation ethic while at the same time valuing the tradition of existing small-scale entrepreneurial fishers who have fished the waters of the NWHI for decades and who have been subject to the MSFCMA and its associated requirements and regulations. The Council's recommendation represents a significant shift regarding NWHI fisheries to explicitly incorporate ecosystem management principles while maintaining an established and successful management structure which incorporates the contributions of all stakeholders.

Western Pacific Fishery Management Council Recommendation for NWHI Sanctuary Fishing Regulations



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

III. EVALUATION OF THE COUNCIL'S RECOMMENDATION

This section evaluates the consistency of the Council's recommendation with 1) the purposes and policies of the National Marine Sanctuaries Act, 2) the proposed goals and objectives of the proposed NWHI National Marine Sanctuary and 3) the National Standards of the Magnuson-Stevens Fishery Conservation and Management Act.

A. CONSISTENCY WITH THE PURPOSES AND POLICIES OF THE NATIONAL MARINE SANCTUARIES ACT

This section evaluates the manner in which the Council's recommendation is consistent with the purposes and policies of the National Marine Sanctuaries Act as described in that document and enumerated below.

(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;

The Council's recommendation is consistent with the identification and designation of the NWHI as a sanctuary because it provides a science-based fishery management regime based upon more than thirty years of research and twenty years of active management specific to this unique area. The Council's recommendation will allow limited and controlled sustainable uses coupled with strong ecosystem protection and continued monitoring and research.

(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;

The Council's recommendation is consistent with the comprehensive and coordinated conservation of the proposed NWHI sanctuary in a manner which complements existing regulatory authorities because it provides mechanisms for the Council, NOAA, the U.S. Fish and Wildlife Service and the State of Hawaii to exercise their statutory authorities within a carefully controlled ecosystem approach to management of this unique area. The Council's recommendation will not impact activities or areas under the jurisdiction of any of these entities but will rely on Memorandums of Understanding between the Council, NOAA and other management entities to coordinate management activities.

(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;

The Council's recommendation is consistent with the maintenance, restoration and enhancement of biological communities of the NWHI because it maintains and advances proven management

techniques which have resulted in NOAA's recent characterization of the NWHI coral reef ecosystem as "pristine" (Maragos and Gulko, 2002, www.hawaiiireef.noaa.gov) and one of the healthiest and most undisturbed coral reefs in the United States (Executive Order 13178, 2000) and indeed on the planet (National Ocean Service, 2003-2004). Inclusion of all NWHI fisheries within one or more science-based fishery ecosystem management plans will strengthen current protections and modernize NWHI resource management in accordance with ecosystem management principles. In addition, improved research coordination will continue past successes that have seen a 30 year recovery trend in Hawaii's green sea turtle population (Balazs and Chaloupka, 2004), increased numbers of nesting black-footed and Laysan albatrosses (USFWS, 2004, 2005) and the protection of NWHI monk seal colonies (PIFSC, 2003).

(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;

The Council's recommendation will enhance awareness, understanding, appreciation and the wise and sustainable use of the proposed NWHI sanctuary in the short-term by allowing carefully controlled access to small scale commercial fisheries such as the bottomfish fishery, pelagic hook-and-line fisheries which have a strong recreational component, and limited additional Native Hawaiian commercial and subsistence use. In the long-term, controlled harvests of other fishery resources could be allowed under the Council's fishery ecosystem management plans if found to be consistent with the maintenance of the area's ecosystem, integrity and natural character.

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

The Council's recommendation will support the development and implementation of the NOAA's Hawaii Archipelagic Living Marine Resource Research Plan. Development of this plan is being led by NOAA's Pacific Islands Fisheries Science Center, in coordination with the National Ocean Service, the State of Hawaii, the Council, the University of Hawaii, the U.S. Fish and Wildlife Service and other NWHI research and management agencies and will provide a coordinated research program that will draw upon the expertise of each agency, avoid duplicative efforts, and result in improved results that are obtained in a cost-effective manner to support and refine management of NWHI fisheries and ecosystems. The inclusion of limited fishing with increased monitoring requirements in the Council's recommendation ensures that important fishery dependent data (e.g., logbook) will be collected. This is an important data source for marine researchers and provides a virtually cost-free long-term data set that reveals much about the status of both fishery resources and the ecosystem in general. These fisheries will also be subject to federal observer requirements which yield extensive and detailed data concerning fishery operations and harvests.

(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;

The Council's recommendation will facilitate public and private uses of the proposed NWHI sanctuary within a science-based framework of resource protection by allowing those uses that have been determined not to threaten the area's marine resources. Such uses will include carefully controlled small-scale commercial and recreational fisheries and Native Hawaiian harvesting rights.

(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;

The Council's recommendation is consistent with the increased coordination of resource management plans and approaches because it supports the development of science-based fishery ecosystem management plans in consultation with the National Marine Sanctuary Program, the State of Hawaii, and the U.S. Fish and Wildlife Service. The Council has and will continue to work to secure Native Hawaiian fishing rights, and has produced two reports on this topic in cooperation with Hawaii's Office of Hawaiian Affairs. In addition, the implementation of the NOAA's Hawaii Archipelagic Living Marine Resource Research Plan will provide a matrix approach to marine ecosystem research that will streamline and integrate increasing research interests in this unique area. The Council's recommendation to manage NWHI fisheries under the Magnuson-Stevens Fishery Conservation and Management Act will continue to allow active and public participation by the National Ocean Service, NOAA Fisheries, the State of Hawaii, the U.S. Fish and Wildlife Service, NOAA's Office of Law Enforcement, the U.S. Coast Guard and other public and private interests through the transparent and participatory decision-making and regulatory process required by the MSFCMA.

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

The Council's recommendation is consistent with the adoption of innovative models, incentives and management techniques because it encourages and anticipates the development of fishery ecosystem management plans that are based upon the latest scientific information regarding ecosystem-based management. These plans will utilize information and findings from the Council's January 2004 Workshop on the Development of Bottomfish Resource Assessment Methodologies for the U. S. Central and Western Pacific Fisheries, the Council's February 2004 Coral Reef Fish Stock Assessment Workshop, the November 2004 Northwestern Hawaiian Islands Third Scientific Symposium (funded by the Council and jointly sponsored by NOAA Fisheries, the National Ocean Service, the U.S. Fish and Wildlife Service, Hawaii's Department of Land and Natural Resources, and the University of Hawaii), and the Council's April 2005

Ecosystem Science and Management Planning Workshop: Development of Ecosystem-based Approaches to Marine Resource Management in the Western Pacific Region, as well as from other sources.

The Council's recommendation will also continue the MSFCMA's requirements that detailed annual reports be completed on all managed fisheries, and that all interim and annual reports be reviewed by the Council's Scientific and Statistical Committee, Plan Teams and Working Groups so that necessary management changes are made in a timely manner.

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

The Council's recommendation will support global programs encouraging conservation of fishery resources by providing leadership in the adoption of science-based fishery ecosystem management approaches which balance the protection and conservation of fishery resources with carefully controlled uses that encourage voluntary compliance with good stewardship principles and all applicable laws. As an example voluntary compliance (compliance in the absence of observers or enforcement agents) with prohibitions on the use of explosives, poisons or destructive fishing gears has been found to be high as NWHI fishermen understand the basis and benefits of such measures. In contrast, voluntary compliance by hook-and-line fishermen with area closures that intended to protect NWHI benthic habitat may be lower as participants are aware that these fisheries have been found to have no discernable impact on such habitat (Kelley and Moffit, 2004). Enforcement authorities have come to see voluntary compliance as an essential element of successful conservation efforts. Recent Council projects to encourage international conservation of marine resources include the March 2005 Regional Workshop on Fisheries Legislation and Community- Based Fisheries Management. This workshop was co-sponsored by the Council, the United Nations' Food and Agriculture Organization, and the Secretariat of the Pacific Community and included fishery managers and other attendees from more than 20 Pacific nations.

B. CONSISTENCY WITH THE PROPOSED GOALS AND OBJECTIVES OF THE NWHI SANCTUARY

This section evaluates the manner in which the Council's recommendation is consistent with the 7 proposed goals and 40 proposed objectives of the NWHI sanctuary as described in the NMSP's September 20, 2004 "*Proposed Northwestern Hawaiian Islands National Marine Sanctuary Advice and Recommendations for Development of Draft Fishing Regulations under the National Marine Sanctuaries Act 304(a)(5)*". Each goal and objective is described individually and it should be noted that several of the items listed as "objectives" are in fact specific goals (e.g., Objectives 7a and 7b, "prohibit non-subsistence crustacean fishing" and "prohibit commercial precious coral fishing, respectively). In contrast, the Council has proposed a revised Goal 7 and objectives with a broad ecosystem conservation theme (see Appendix C to this paper).

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.

Objective 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.

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

Objective 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.

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

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

The Council's recommendation is consistent with the National Marine Sanctuary Program's proposed Goal 1 and associated Objectives 1a-1e because it will protect, preserve and, where appropriate restore, NWHI fishery resources as a public trust for current and future generations. The Council's recommendation will achieve this by contributing to a comprehensive, ecosystem-based management plan for the NWHI Sanctuary that is based on the latest scientific information regarding the NWHI and the role and impacts of historical and potential fishing activities there, as well as the area's ecological relationship to the Main Hawaiian Islands.

The Council's recommendation is clearly precautionary given recent findings on the pristine nature of the ecosystem (Maragos and Gulko, 2002, www.hawaiiireef.noaa.gov) and the low level of ecological impacts from these fisheries as managed by the Council (Kelley and Moffit, 2004, DiNardo, 2005, Moffit, 2005), that has led to the NWHI to be regarded as one of the healthiest and most undisturbed coral reefs in the United States (Executive Order 13178, 2000) and indeed on the planet (National Ocean Service, 2003-2004). Despite these findings the Council's recommendation will prohibit the harvest of crustaceans, precious corals and coral reef ecosystem associated fishery resources (and continue prohibitions on pelagic longlining and damaging gear types as well as the zone-based limited entry program and size limits for bottomfishing vessels) until the fishery ecosystem fishery management plans described above are approved by NOAA and implemented for federal waters around the NWHI. These plans are anticipated to continue the use of a wide range of innovative management approaches, including but not limited to the use of marine protected areas in which all fishing is prohibited, fishing gear and permit restrictions, vessel size limits and monitoring systems, zone based fishing caps, size

and other limits for harvested species, preferential fishing rights for Native Hawaiians, protected species workshops for fishery participants and federal reporting and observer requirements.

As with all Council management measures under the MSFCMA, these plans will also include all necessary prohibitions, rules and regulations required to conserve and protect the area's fishery resources and essential fish habitat, and will be developed in coordination with the U.S. Coast Guard and NOAA's Office of Law Enforcement, who together monitor and enforce compliance through the use of in-water, fly-over and remote surveillance techniques coupled with appropriate penalty schedules and prosecution activities. In addition, the MSFCMA requires that any fishery management plan be consistent with all applicable laws, including the National Environmental Policy Act, the National Marine Sanctuaries Act, the Endangered Species Act, the Marine Mammal Protection Act, the Administrative Procedure Act, Executive Order 12866, the Regulatory Flexibility Act, the Data Quality Act, and the Coral Reef Protection Act of 2000.

New management techniques that may be incorporated include the use of both leading and real-time ecosystem indicators (e.g., oceanic regime shifts and shifts in biodiversity) to predict and proactively react to potential impacts to NWHI resources, as well as the incorporation of advanced oceanographic sensing data and other emerging technologies.

The fishery ecosystem plans will be prepared, reviewed by NOAA, and if approved, codified and implemented under the MSFCMA's requirements and associated Council process. Other important guidance will come from NOAA's ecosystem management workshops and guidance, scientific and management workshops held by the Council and from the NMSP as a cooperative partner. Using the Council process, which includes significant and ongoing scientific review by NOAA and other scientists, will ensure that such plans achieve their conservation goals. In addition, the MSFCMA and Council process ensure that other NWHI resource agencies (i.e. the U.S. Fish and Wildlife Service, the State of Hawaii and the U.S. Coast Guard) participate in any plan development through their role as Council members. Finally, this approach ensures substantial participation by the public through a series of scoping meetings, public hearings and public comment periods.

The Council's recommendation will support global programs encouraging conservation of fishery resources by providing leadership in the adoption of fishery management approaches which balance the protection and conservation of fishery resources with carefully controlled public and private uses, in a manner that encourages voluntary compliance with good stewardship principles and all applicable laws.

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

Objective 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.

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

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

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

The Council's recommendation is consistent with the National Marine Sanctuary Program's proposed Goal 2 and associated Objectives 2a-2d because it complements existing jurisdictional boundaries and management regimes by continuing the management of NWHI fisheries in federal waters under the MSFCMA. The State of Hawaii, the U.S. Fish and Wildlife Service and the National Marine Sanctuary Program will maintain their separate authorities and will be included in the ongoing management of NWHI fisheries through their continued participation in the Council's fishery management process.

Similarly, management of NWHI fisheries under the MSFCMA will ensure that the management process remains transparent and open to representative stakeholders and broad public participation as it requires a series of public meetings and publically available documentation prior to any Council decision and throughout the rule making process. The Council process also directly engages stakeholders through their participation in Council Advisory Panels, the Bottomfish Advisory Review Board, Advisory Committees and various Task Forces as well as their membership on the Council itself.

Explicit consideration of impacts on fishing communities will continue to be required under the MSFCMA's National Standard 8: "Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks) take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities."

The Council's recommendation will support the development and implementation of local, regional and global approaches and agreements to address cross-jurisdictional activities by providing leadership in the adoption of ecosystem-based fishery management measures which balance the protection and conservation of fishery resources with carefully controlled public and private uses, in a manner that encourages voluntary compliance with good stewardship principles and all applicable laws.

The Council's recommendation will also continue a proven and accepted system for the issuance and tracking of federal fishing permits and fishing activities that provides the basis for a general access permit system should this become necessary.

Finally, as discussed above, the Council's recommendation will enhance the coordination of activities to minimize ecosystem impacts and avoid redundant or duplicative efforts by supporting NOAA's Hawaii Archipelagic Living Marine Resource Research Plan which will draw upon the expertise of all NWHI research and management entities and result in improved research programs that are conducted in a cost-effective manner.

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.

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

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

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

Objective 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.

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

Objective 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.

The Council's recommendation is consistent with the National Marine Sanctuary Program's proposed Goal 3 and associated Objectives 3a-3f because it will only allow those fishing activities that have been shown not to threaten the region's ecosystem.

As described above, 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 implemented by NOAA Fisheries. In the interim, fishing for bottomfish species will be managed under a limited entry zoning system that will allow no more than 17 vessels to fish the entire 1,200 mile NWHI chain (10 vessels within the southerly Mau Zone and 7 vessels within the northern Ho'omalū Zone). Fishing for pelagic

species will also be allowed by use of trolling or handline hook-and-line gear. In addition, no-take marine protected areas will be implemented in which all fishing will be prohibited. In addition to allowing for the continuation of activities shown to be consistent with long-term ecosystem protection, the presence of fishing vessels in the NWHI will assist in monitoring and reporting of any suspicious activities, thus acting as Homeland Security Partners for the U.S. Coast Guard. It is likely that some or all of these interim measures will also be incorporated into any NWHI fishery ecosystem management plans.

During the development and implementation of fishery ecosystem management plans, fishing will also be allowed by Native Hawaiian communities under the Council's Western Pacific Community Development Program. Preferential Native Hawaiian participation will occur through the issuance of two of the ten Mau Zone bottomfishing permits under a Western Pacific Community Development Program first recommended by the Council in 2003, with preferential subsistence fishing possible as Community Development Programs are developed for other NWHI fisheries. In addition, non-preferential access will also be available to Native Hawaiians through participation in NWHI pelagic troll and handline fisheries. Non-fishing activities by Native Hawaiians (e.g., cultural or religious uses) and transiting or other non-fishing vessels or activities will not be regulated under the Council's recommendation as they are outside of the jurisdiction of the MSFCMA.

The Council's recommendation will continue a proven and accepted system for the issuance and tracking of federal fishing permits and logbooks that provides an appropriate basis for a general access permit and monitoring system should this become necessary.

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

Objective 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.

Objective 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.

Objective 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.

Objective 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.

The Council's recommendation is consistent with the National Marine Sanctuary Program's proposed Goal 4 and associated Objectives 4a-4d because it will allow the continuation of carefully controlled fishing within the NWHI sanctuary and the resultant availability of NWHI fish to the public. Given that the vast majority of the population will never visit the NWHI, this will provide a material link to this unique area and its resources as well as a stimulating interest in the NWHI ecosystem and its fishery resources (thus bringing the place to the people rather than the people to the place). Especially important to many Hawaii residents is the consumption of "red fish" (e.g., opakapaka and onaga) for Christmas and New Year's celebrations as part of their cultural heritage. In addition, "made in Hawaii" products such as NWHI bottomfish and lobster play a key role in Hawaii's restaurant and tourism industries, which have both national and international components.

Broad circulation of "compliance guides" which are plain language presentations of fishing regulations developed by NOAA Fisheries will help to inform the public about the fishery management measures in place, while continued outreach efforts by the Council, the NMSP and other partners will provide additional information on the status and available science regarding these resources and ecosystems. The Council is very active in public outreach as the MSFCMA is based on a bottom-up approach to fishery management. The Council, independently and cooperatively with the staff of other agencies works to bring state, regional, national and international attention to the fisheries and related ecosystems under the Council's jurisdiction. Among the outreach activities undertaken are public meetings, workshops, forums and conferences on the conservation and management of fisheries, coral reefs, sea birds, sea turtles and marine mammals; the mitigation of marine debris, and the promotion of marine education, among others. The Council also prepares and distributes annual and interim reports; organizes and participates in a variety of marine-related public events; distributes educational material via mail, video, radio, television, press releases, brochures, posters, display panels, newsletters, and newspaper and magazine articles and inserts; and financial supports local education programs (see Appendix D to this paper for a list of some recent Council produced and supported products). The continued operation of NWHI fisheries through the Council management process as recommended by the Council will ensure that the Council will continue its considerable efforts to provide stakeholders and the public at-large with awareness, understanding and appreciation of the marine environment and cultural and maritime heritage resources of the NWHI.

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

Objective 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.

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

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

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

The Council's recommendation is consistent with the National Marine Sanctuary Program's proposed Goal 5 and associated Objectives 5a-5d because it will allow limited fishing by qualifying 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 will occur through the issuance of two of the ten Mau Zone bottomfishing permits under a Community Development Program previously developed and recommended by the Council, preferential subsistence use could occur by as Community Development Programs are developed for other NWHI fisheries. These programs are set forth in the MSFCMA and are designed to provide access for indigenous Pacific Islanders to participate in Federally managed fisheries. In addition, non-preferential access will also be available to Native Hawaiians through participation in NWHI pelagic troll and handline fisheries. All permits and fisheries will be required to be consistent with applicable laws, including those the no-take areas discussed here. It is likely that some or all of these interim measures will also be incorporated into any NWHI fishery ecosystem management plans.

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.

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

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

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

Objective 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.

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

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

The Council's recommendation is consistent with the National Marine Sanctuary Program's proposed Goal 6 and associated Objectives 6a-6f because it will support the development and implementation of NOAA's 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 to support and refine management of NWHI fisheries and ecosystems. Implementation of this plan will provide a coordinated research program that will identify, review, assess and prioritize existing and necessary research and monitoring programs and draw upon the expertise of each agency to avoid duplicative efforts. This collaborative plan will also address the issue of criteria for appropriate marine research activities within the NWHI sanctuary, and will lead to improved coordination regarding the use of government and commercial vessels for research and monitoring. In addition, this coordinated plan, in conjunction with the Council's and other agencies' ongoing workshops, symposiums and outreach projects will contribute to the timely dissemination of research results to the public and research partners.

Similarly, the continuation of over thirty years of NWHI fishery and ecosystem monitoring by NOAA Fisheries will provide a consistent and cost-effective long-term database of scientific information that will inform decision makers and the public regarding conservation and management of NWHI resources.

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.

The Council's recommendation is consistent with the National Marine Sanctuary Program's proposed Goal 7 and associated Objectives 7a-7k because, as described above, it will only allow those appropriate fishing activities that have been shown not to threaten the NWHI sanctuary's (or any other) ecosystem, natural character or biological integrity, and will do so in a manner that minimizes socioeconomic impacts to fishery participants, community members, and the Nation. The Council's recommendation will also close Federal waters from 0-10 fathoms around each emergent island or atoll as well as within federal waters from 0-50 fathoms around French Frigate Shoals, Laysan Island, and the northern half of Midway Atoll to all fishing. These areas are believed to encompass all NWHI shallow coral reef habitat (NMSP, 2004) and for that reason are considered to be sensitive areas and appropriate for no-take MPAs. Allowing the limited permitted fishing effort to be distributed across the remainder of the area is appropriate as it will avoid localized depletion and enable fishery participants to continue their practices of fishing each area lightly and then moving on to the next available area. It will also provide marine researchers with fishery dependent data from a wide range of areas. In addition, the Council's recommendation will encourage and coordinate appropriate research on the NWHI coral reef ecosystem to support and refine management of NWHI fisheries and ecosystems.

The Council's recommendation is clearly appropriate and precautionary given recent findings on the pristine nature of the ecosystem (Maragos and Gulko, 2002, www.hawaiiireef.noaa.gov) and the low level of ecological impacts from these fisheries as managed by the Council (Kelley and Moffit, 2004, DiNardo, 2005, Moffit, 2005), that has led to the NWHI to be regarded as one of the healthiest and most undisturbed coral reefs in the United States (Executive Order 13178, 2000) and indeed on the planet (National Ocean Service, 2003-2004). Despite these findings, the Council's recommendation will prohibit the harvest of crustaceans, precious corals and coral reef ecosystem associated fishery resources (and continue prohibitions on pelagic longlining and

damaging gear types as well as the zone-based limited entry program and size limits for bottomfishing vessels) until one or more fishery ecosystem fishery management plans are developed by the Council in consultation with the NMSP and approved and implemented by NOAA Fisheries under the MSFCMA.

Please see Appendix A for a detailed evaluation of the anticipated impacts of the Council's recommendation upon the environment.

C. CONSISTENCY WITH THE MAGNUSON-STEVENSON FISHERY CONSERVATION AND MANAGEMENT ACT'S NATIONAL STANDARDS

This section evaluates the consistency of the Council's recommendation with the MSFCMA's national standards. Under the MSFCMA, all fishery management plans (and amendments) must be consistent with the national standards. With the exceptions of the Council's recommendations to establish new entry criteria for Maui Zone limited access fishing permits (including Western Pacific CDP permits), suspend the NWHI bottomfish fishery's minimum landing requirements, implement no-take MPAs, implement permit and reporting requirements for pelagic troll and handline vessels, and establish moratoriums for fishing for lobster, precious corals and coral reef associated species, all measures of the Council's recommendation are currently contained in the Council's Fishery Management Plans and have been determined by NOAA to be consistent with the MSFCMA's national standards and all other applicable laws.

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.

The Council's recommendation is consistent with National Standard 1 because it continues an approved management regime that controls NWHI fishing through the use of limited entry programs, vessel size limits, gear restrictions, moratoriums and other adaptive management measures that prevent overfishing while achieving long-term optimum yields as defined by NOAA. The Council's recommended moratorium on lobster, precious corals, and coral reef associated species represents a loss of net national benefits in the short-term, however the implementation of fishery ecosystem fishery management plans that reconsider these activities will assure the long-term integrity of the NWHI ecosystem, prevent overfishing, and achieve long-term optimal yields that consider all relevant ecosystem effects.

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

The Council's recommendation is consistent with National Standard 2 because it is based upon scientific research which has found the NWHI bottomfish and pelagic troll and handline fisheries to have no discernable impacts on the NWHI coral reef ecosystem which is the focus of the

proposed sanctuary. Regarding lobster, precious corals, and coral reef ecosystem associated species, the Council's recommendation imposes a moratorium on these fisheries until one or more fishery ecosystem management plans are implemented which fully consider the complete range of potential effects on both marine and terrestrially based NWHI resources. Although the most recent scientific information indicates that these fisheries are unlikely to have adverse impacts on the NWHI coral reef ecosystem or Main Hawaiian Islands resources, some uncertainty remains and the Council's recommendation takes a precautionary approach for these fisheries.

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

The Council's recommendation is consistent with National Standard 3 because it maintains management of stocks within the Western Pacific under one authority, thus ensuring that coordinated and appropriate measures are applied throughout the range of all potentially affected stocks.

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

The Council's recommendation is consistent with National Standard 4 because it does not discriminate between residents of different states. Where allocation is necessary (i.e. in the bottomfish fishery which is managed under a limited entry program), participation is based upon historical participation with total effort limited to no more than 17 vessels with a maximum vessel length of 60 feet. The pelagic troll and handline fishery remains an open access fishery which ensures available commercial and recreational fishing opportunities for the general public. Limited preferential access is provided to Native Hawaiians in accordance with the Western Pacific Community Development Program established by the MSFCMA.

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

The Council's recommendation is consistent with National Standard 5 because it regulates NWHI bottomfish fishing through the use of limited entry programs that allow fishery participants to maximize the efficiency of their operations and avoid "the tragedy of the commons". In addition, the recommended moratorium on NWHI lobster fishing maintains the opportunity for these permit holders to maintain the option value of their permits pending the implementation of fishery ecosystem management plans.

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

The Council's recommendation is consistent with National Standard 6 because it considers the unique characteristics of each NWHI fishery and its resources, continues fishery monitoring and research programs and allows for adaptive and ecosystem based management approaches which allow fishery managers to adjust fishery regulations in a timely manner as new information becomes available.

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

The Council's recommendation is consistent with National Standard 7 because it utilizes existing management, monitoring and research institutions and processes. In addition the Council's recommendation supports further coordination of research by the increasing number of entities working in the NWHI.

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

The Council's recommendation is consistent with National Standard 8 because it continues a management regime that controls NWHI fishing through the use of limited entry programs, vessel size limits, gear restrictions, moratoriums and other adaptive management measures that prevent overfishing while allowing long-term participation by fishing communities. Where limits on fishing are necessary (i.e. the NWHI bottomfish fishery), participation is based upon historical participation. However the pelagic troll and handline fishery remains an open access fishery which ensures available commercial and recreational fishing opportunities for fishing communities. Additional preferential access is provided to Native Hawaiian communities in accordance with the Western Pacific Community Development Program established by the MSFCMA.

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

The Council's recommendation is consistent with National Standard 9 because it primarily relies on limited entry programs which do not lead to regulatory discards (bycatch which can result from prohibitions on the retention of certain sizes or species of fish). The Council's recommendation also will not result in highgrading (bycatch which can result from catch quotas which limit the number of fish which can be landed).

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

The Council's recommendation is consistent with National Standard 10 because it does not impose measures which could jeopardize the safety of human life at sea (such as fleet wide quotas that can under certain circumstances result in a dangerous "race to the fish").

IV. SUMMARY AND CONCLUSIONS

Based on the above discussion and information contained elsewhere in this document, the Council's recommendation is consistent with the purposes and policies of the NMSA, the proposed goals and objectives of the proposed NWHI National Marine Sanctuary and the MSFCMA's national standards. In addition, it avoids a duplication of management, monitoring and research efforts by recognizing and supporting the coordination of the expertise of all research and management partners. This approach will ensure that this unique area maintains its natural and pristine character for the wonder and enjoyment of many future generations to come.

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