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Amendment 2 to the Fishery Ecosystem Plan for the Hawaii Archipelago

Management Measures for the Hancock Seamounts to Address the Overfished Condition of Armorhead (*Pseudopentaceros wheeleri)*

Photo credit: National Marine Fisheries Service, Pacific Islands Fisheries Science Center

Including an Environmental Assessment

August 6, 2010

Western Pacific Regional Fishery Management Council
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Executive Summary

In 1986, the Western Pacific Regional Fishery Management Council (Council) prepared, and the Secretary of Commerce approved, a Fishery Management Plan (FMP) for the bottomfish and seamount groundfish fisheries in the Western Pacific Region. Subsequently, the Council implemented an ecosystem approach to management, establishing Fishery Ecosystem Plans (FEP) for each archipelago under its jurisdiction. This amendment to the Hawaii Archipelago FEP was initiated because the moratorium at Hancock Seamounts that prohibits fishing of armorhead, among other bottomfish and seamount groundfish, is set to expire August 31, 2010. As armorhead is in an overfished status, this amendment addresses rebuilding requirements under MSA 304(e)(4).

The first moratorium was implemented in 1986 to aid the recovery of the armorhead stock, which was overexploited by foreign fishing fleets prior to the enactment of the Fishery Conservation and Management Act (now called the Magnuson-Stevens Fishery Conservation and Management Act (MSA)) in 1976. Periodic reviews since the original moratorium was implemented consistently determined that stock recovery did not occur, thus three subsequent moratoria followed.

In 1992 (57 FR 36907), the moratorium was extended to August 31, 1998. In 1997, armorhead was officially listed as an overfished stock in the "Report to Congress Status of Fisheries of the United States," and in 1998 the moratorium was again extended for six years (63 FR 35162). The last moratorium was implemented in 2004 (69 FR 35570) and is set to expire on August 31, 2010.

This amendment analyzes alternatives to rebuild the overfished armorhead stock that include: 1) continue the moratorium for another six years, 2) allow the moratorium to expire, or 3) define Hancock Seamounts as an Ecosystem Management Area and establish moratorium on fishing that will remain in place until armorhead is determined to be rebuilt. Through the moratorium on fishing for armorhead, fishing for two other seamount groundfish (raftfish and alfonsin) and bottomfish is also prevented.

At the 147th Council meeting in Tumon Bay, Guam, the Council selected Alternative 3, implementation of Hancock Seamounts Ecosystem Management Area, as its preferred alternative. This alternative provides the longest-term protection of the U.S. portion of the armorhead stock (10+ years), provides a control site against which to compare fished seamounts, and requires Council action to resume fishing for bottomfish and seamount groundfish at Hancock Seamounts (as opposed to an expiration of a moratorium, which implicitly would allow fishing without Council action). Additionally, this amendment implements a minimum rebuilding time (T_{min}) of 35 years for the U.S. portion of the armorhead stock.

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List of Acronyms and Abbreviations

BMUS	Bottomfish Management Unit Species
CFR	Code of Federal Regulations
CZMA	Coastal Zone Management Act
EEZ	Exclusive Economic Zone
EFH	Essential Fish Habitat
ESA	Endangered Species Act
FEP	Fishery Ecosystem Plan
FMP	Fishery Management Plan
FR	Federal Register
HAPC	Habitat Areas of Particular Concern
HDAR	State of Hawaii, Division of Aquatic Resources
IRFA	Initial Regulatory Flexibility Analysis
MHI	Main Hawaiian Islands
MMPA	Marine Mammal Protection Act
MSA	Magnuson-Stevens Act
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service (NOAA Fisheries)
NPRFMA	North West Pacific Regional Fishery Management Arrangement
NOAA	National Oceanic and Atmospheric Administration
NWHI	Northwestern Hawaiian Islands
PIFSC	Pacific Islands Fisheries Science Center
PIRO	Pacific Islands Regional Office
PMUS	Pelagic Management Unit Species
RFMO	Regional Fishery Management Organization
SE-NHR	Southern Emperor-Northern Hawaiian Ridge
WPacFIN	Western Pacific Fishery Information Network
WPRFMC	Western Pacific Regional Fishery Management Council (Council, Western Pacific Fishery Management Council)

1.0 BACKGROUND INFORMATION

When the Fishery Management Plan for the Bottomfish and Seamount Groundfish Fisheries of the Western Pacific Region (Bottomfish FMP) was implemented in 1986 (51 FR 27413, July 31, 1986), it was determined that a six year moratorium on fishing at the Hancock Seamounts was needed to aid the recovery of the pelagic armorhead (*Pseudopentaceros wheeleri*, formerly known as *Pentaceros richardsoni*). Although no domestic fishery has ever targeted this stock, prior to the passage of the Fishery Conservation and Management Act of 1976 (now called the Magnuson-Stevens Fishery Conservation and Management Act (MSA)), foreign vessels harvested and depleted the pelagic armorhead stock throughout its range of the Emperor Seamount Chain and the Hawaiian Ridge Seamount Chain (hereafter referred to as the Southern Emperor – North Hawaiian Ridge (SE-NHR) Seamounts), which includes Hancock Seamounts (Figures 1 and 2). After the MSA was implemented, foreign vessels were excluded from fishing the southern limit of the Emperor Seamounts, which is primarily the Hancock Seamounts located within U.S. waters. However, in response to an application to the Secretary of State from a foreign fishing nation, the Council prepared a preliminary fishery management plan which provided for a Total Allowable Level of Foreign Fishing (TALFF). From 1978-1984, the U.S. administered TALFF permits to Japan to fish Hancock Seamounts. The foreign fleets from Japan, Korea, and Russia have continued to fish the remaining area of the SE-NHR Seamounts that is in international waters, while nationally, armorhead was listed as overfished in the September 1997 "Report to Congress Status of Fisheries of the United States."

During implementation of the Bottomfish FMP, the Council prohibited the use of bottom trawl gear to harvest bottomfish and seamount groundfish throughout the entire western Pacific region. The pelagic armorhead at Hancock Seamounts have been considered overfished and thus bottomfish and groundfish at Hancock Seamounts have been subject to a moratorium on domestic fishing to allow for armorhead recovery since 1986. Periodic reviews since that time have consistently determined that the stock has not recovered and remains overfished (69 FR 51400, August 19, 2004). The Council consequently extended the moratorium to aid the armorhead rebuilding plan in 1992 (57 FR 36907, August 17, 1992), 1998 (63 FR 35162, June 29, 1998), and again in 2004 (69 FR 51400), respectively. The current moratorium expires August 31, 2010. Although only pelagic armorhead are considered overfished, the Hancock moratorium applies to all the seamount groundfish, armorhead, alfonsin (*Beryx splendens*), and raftfish (*Hyperoglyphe japonica)*, and other bottomfish managed under the Hawaii Archipelago FEP (previously managed under the Bottomfish FMP) because they are caught using the same gear type, so targeting one species would likely result in incidental catches of the other.

The Council recognizes that because only a small percent (less than 5 percent, Figure 1; Humphreys 2009) of the SE-NHR Seamounts armorhead habitat lies within U.S. jurisdiction, rebuilding of the stock must be accomplished through coordinated international management. However, a prohibition on all catches in U.S. waters provides the maximum protection available for SE-NHR Seamounts' groundfish stocks in waters under Council jurisdiction. The Participating States, including Russia, Japan, Korea, and the U.S., of the North Pacific Regional Fishery Management Agreement (NPRFMA) have been discussing joint high seas management options, but as of yet is not a "recognized" international management organization for the purposes of MSA 304(i) [sic-International Overfishing]. The U.S. does not have a domestic

fishery at Hancock Seamounts, which is the southernmost extent of armorhead range; the U.S., Russia, Japan, and Korea have agreed to fishery conservation measures for the armorhead fishery of the SE-NHR Seamounts. Please see Section 1.1 for a description of the conservation and management measures agreed to by the U.S., Russia, Japan, and Korea. Background information on armorhead life history, the seamount trawl fishery and status of the armorhead stock can be found in the PIFSC Internal Report *The Seamount Groundfish (Armorhead) Fishery: Background, Stock Status, and Management Issues* (IR-09-005_06 Feb09).

The location of Hancock Seamounts in relation to the Northwestern and Main Hawaiian Islands is depicted in Figure 1. The area does not overlap with any other federally managed marine area, including the Papahānaumokuākea Marine National Monument. Hancock Seamounts in relation to the SE-NHR Seamount chains is illustrated in Figure 2. They are located at the northwestern edge of U.S waters around Hawaii (Figure 3).

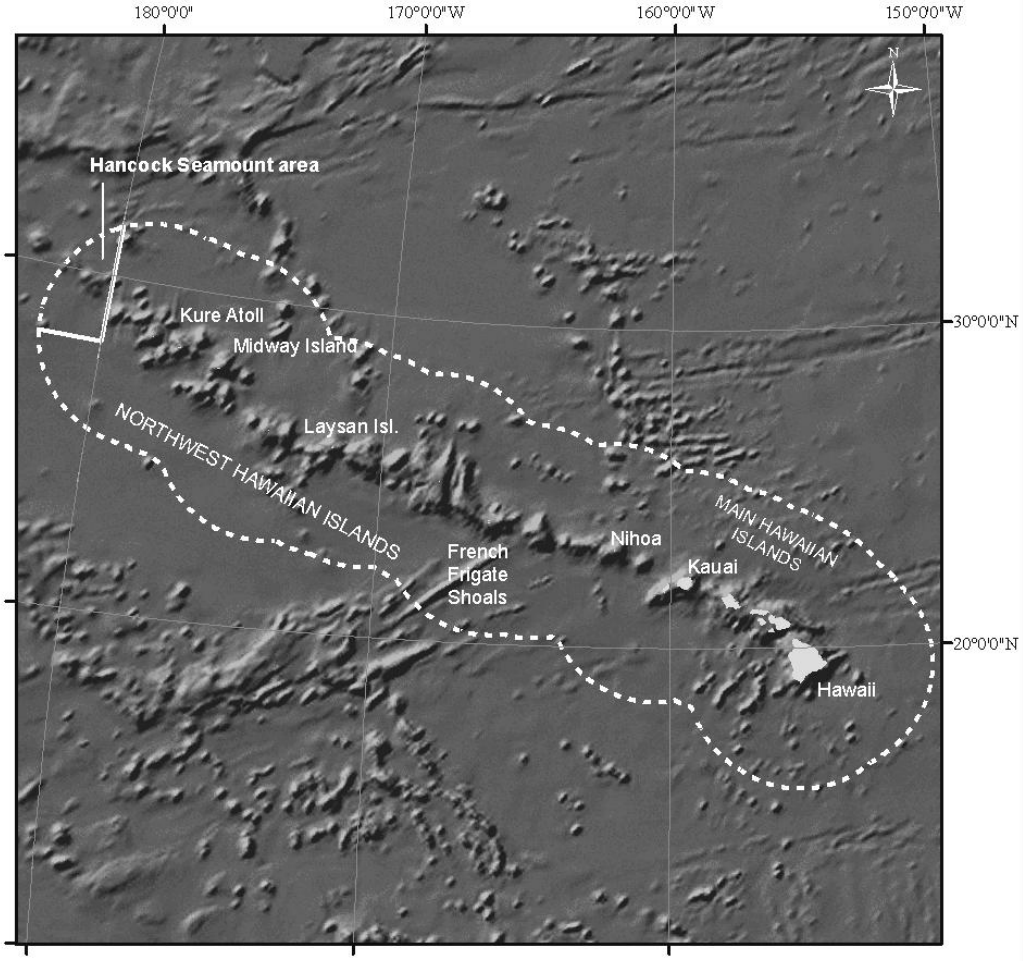

Figure 1. Map of Hancock Seamounts and the Hawaiian Islands. Hancock Seamounts and the Hancock Seamounts moratorium area are depicted in relation to the U.S. EEZ (dashed line) and Northwestern and Main Hawaiian Islands. The Hancock Seamounts moratorium area is currently defined as waters within the EEZ that are west of 180° W and north of 28° N, and is coterminous with the preferred alternative (3), the creation of Hancock Seamounts Ecosystem Management Area.

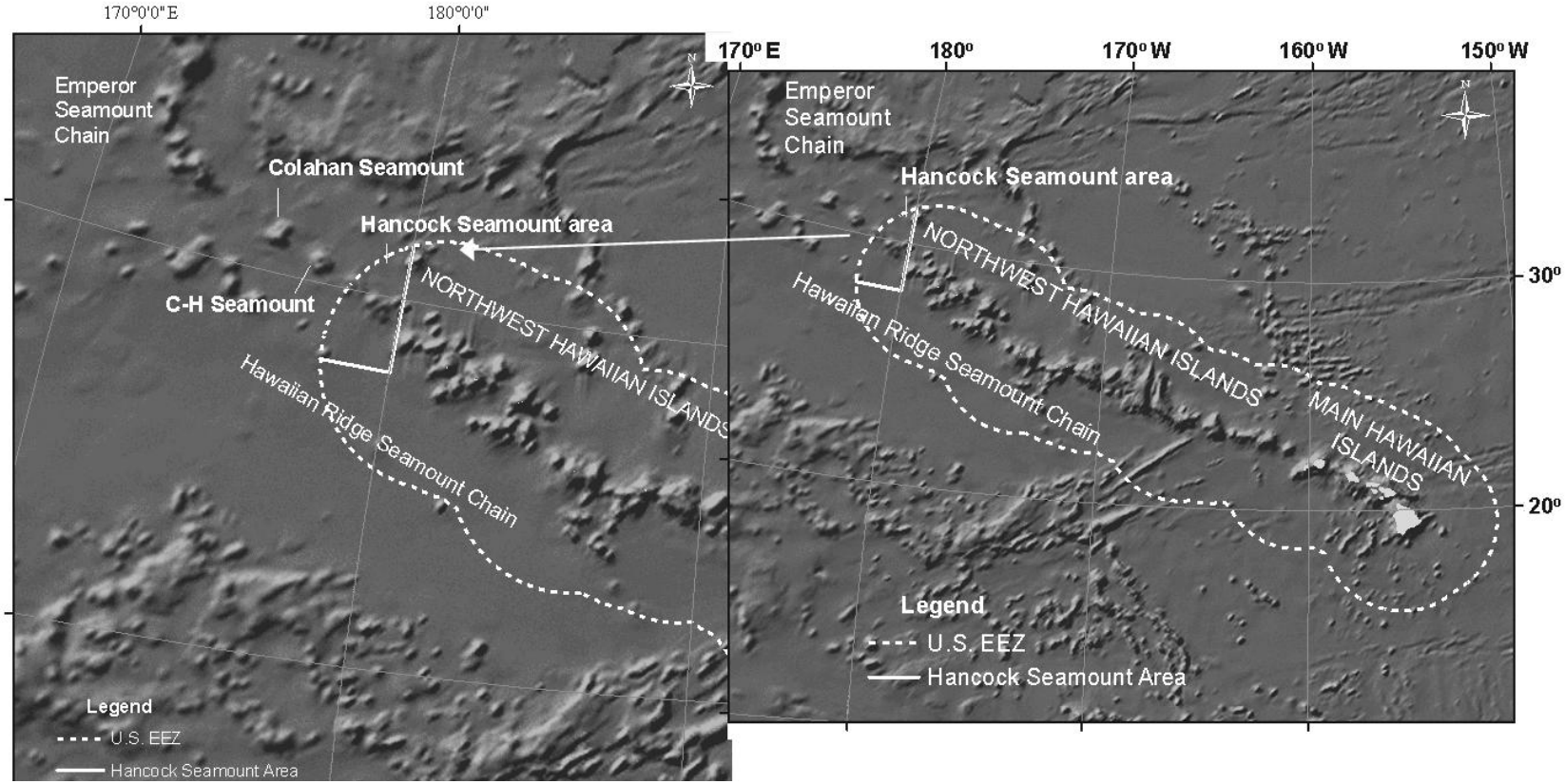

Figure 2. Hancock Seamounts depicted with Colahan and C-H Seamounts. The picture on the right shows the location of Hancock Seamounts in relation to the southern part of the Emperor Seamount Chain and the Hawaiian Ridge Seamount Chain. On the left, the two guyots that comprise the major points of Hancock Seamounts can be seen, along with the Colahan Seamount, which is at the center of a debate among Participating States of the NPRFMA about whether to allow fishing (the U.S. argues that it is essential habitat for the armorhead to use to rebuild, while Japan, Russia, and Korea would agree solely to protect the smaller, less-productive C-H seamount).

1.1 Domestic and International management actions

As described above, based on the Council's recommendation, in August 2004 the National Marine Fisheries Service (NMFS) issued a final rule to extend the moratorium on domestic harvests of seamount groundfish from Hancock Seamounts until August 31, 2010. Beginning in 2007, Japan, Russia, Korea, and the United States began inter-governmental discussions to establish mechanisms for the international management of high seas bottom fisheries in the Northwest Pacific Ocean. The parties are working to establish a North Pacific Regional Fisheries Management Organization (NPRFMO) in response to U.N. Resolution 61/105, which mandates that bottom fisheries operating in international waters be sustainably managed and not cause significant adverse impacts (SAIs) on vulnerable marine ecosystems (VMEs). To date, five inter-governmental meetings have focused on, among other things, the bottom fisheries operating on the SE-NHR seamounts that lie in international waters (Figure 1). The parties have developed and agreed upon several interim measures to improve the sustainability of bottom fisheries in this area and to mitigate potential adverse fishery impacts on seamount ecosystems that contain precious coral beds in the SE-NHR seamounts that were targeted prior to the start of the armorhead bottom trawl fishery in 1968. Interim measures that these nations agree to in principal include cessation of bottom trawling during the armorhead spawning season (November-December) and a 20-25% reduction in bottom trawl fishing mortality, although bottom trawling is already prohibited in all U.S. waters in the western Pacific, including around Hawaii. The U.S. sought a bottomfishing moratorium at Colahan Seamount (comparable in size to the Hancock Seamounts) as an interim measure to rebuild armorhead stocks; however, the other Participating States rejected this proposal and agreed instead to a moratorium at the much smaller C-H Seamount.

1.2 Purpose and Need

Pelagic armorhead is overfished due to overexploitation by foreign vessels prior to the enactment of the MSA 1976. Additionally, due to continued exploitation in international waters by foreign fleets, the stock remains in an overfished condition. Although there has never been a domestic fishery targeting these stocks, the Council and NMFS is required by the MSA to rebuild the overfished armorhead stock and ensure that any future domestic fishery is managed sustainably.

The purpose of the proposed action is to rebuild armorhead stock, to the extent possible through management actions taken in the U.S. EEZ waters around the Hawaiian Islands and to prevent overfishing on the segment of the stock that resides within U.S. jurisdiction. This action would also specify a rebuilding time for armorhead stock as required by MSA 304(e)(4).

1.3 Responsible Agencies

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1.4 Public Review Process

Due to the impending expiration of the moratorium at Hancock Seamounts, the Council revisited the management needs for Hancock Seamounts and the armorhead stock. Council staff was directed by the Council to prepare an amendment to address management measures for armorhead at Hancock Seamounts at the 145th Council meeting in July 2009 (Kona, HI). Public comment was accepted at the 145th, 146th (October 2009) and 147th (March 2010) Council meetings, but no public comment was received regarding this amendment. Final action was taken at the 147th meeting.

1.5 List of Preparers

Sarah Pautzke, Fishery Analyst, Western Pacific Regional Fishery Management Council

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2.0 DESCRIPTION OF ALTERNATIVES

The Council considered three alternatives to rebuild the overfished armorhead stock and prevent overfishing on the segment of the stock that resides within U.S. jurisdiction at Hancock Seamounts at its 147th meeting in Guam in March 2010 and recommended Alternative 3 as its preferred alternative. All alternatives assume that the U.S. (Council, NMFS, and the State Department) will continue to participate in the NPRFMA negotiations to establish appropriate international management measures. Under each of the alternatives considered, the minimum time for rebuilding of the armorhead stock (T_{min}) is 35 years, based on available life history information and scientific uncertainty regarding future recruitment (See section 3.5.1 for more information on rebuilding time for armorhead). Specification of a rebuilding time is required per MSA 304(e)(4) for any overfished fishery.

2.1 Alternative 1: Six Year Moratorium (No Action)

This alternative would continue the established 6-year moratorium for another six years until August 2016, preventing fishing of seamount groundfish and bottomfish. This area would continue to be a control site for scientific research on seamount fisheries because it has not been fished for 24 years, but this status would only be guaranteed for another 6 years and then the status would be contingent on whether a subsequent 6-year moratorium is adopted. This represents the status quo and therefore is the environmental baseline against which the other two alternatives are compared.

2.2 Alternative 2: Expiration of the Six Year Moratorium

This alternative would allow the existing moratorium to expire on August 31, 2010. Allowing the moratorium to expire would end the prohibition on fishing for bottomfish and seamount groundfish at Hancock Seamounts. While there has never been a domestic fishery for seamount groundfish at the Hancock Seamounts, this alternative would allow an opportunity for one to emerge. However, fishing opportunities for bottomfish could not be immediately realized through this action alone, as fishing for bottomfish in the EEZ surrounding the Northwestern

Hawaiian Islands (NWHI), which includes Hancock Seamounts, requires a NWHI bottomfish limited access program permit and NMFS may not issue such permits in accordance with Proclamation 8031 that established the Papahānaumokuākea Marine National Monument (71 FR 51134). Although the Council is considering various actions that would permit fishing for bottomfish seaward of the monument, nothing is in place as of yet that allows bottomfishing.

2.3 Alternative 3: Hancock Seamounts Ecosystem Management Area (preferred alternative)

This alternative would define the portion of the U.S. EEZ in the Northwestern Hawaiian Islands west of 180 degrees West longitude and north of 28 degrees North latitude as the Hancock Seamounts Ecosystem Management Area (EMA). Within the Hancock Seamounts EMA, a moratorium will be established that prohibits fishing for armorhead and other seamount groundfish and bottomfish. The moratorium would continue until NMFS determines the armorhead stock is rebuilt and no longer overfished. At such time, the Council may consider ending the moratorium. The moratorium ensures U.S. fishermen do not contribute to overfishing and delay rebuilding of this overfished stock. Given that no stock rebuilding has occurred during four consecutive 6-year moratoria in place since 1986, it is estimated that this moratoria will last for at least 10 years. The other seamount groundfish and bottomfish are included in the moratorium because fisheries for those species have the potential to catch armorhead incidentally, as well as impact armorhead habitat.

Defining Hancock Seamounts as an ecosystem management area (EMA) would acknowledge the significance of the area as a monitoring and research site to undertake ecological studies on bottomfish and seamount groundfish and their associated benthic habitats, as well as allow the EMA to continue to serve as the area in which the maximum U.S. contribution to rebuilding of armorhead stocks would occur. Additionally, the Hancock Seamounts EMA could also serve as a control site for future research that assesses the effectiveness of management actions being considered by the Participating States of the NPRFMA, such as seasonal closures and bank-specific closures in adjacent international waters.

When the armorhead stock is determined to be rebuilt, the Council may choose to end the moratorium and permit fishing on Hancock Seamounts, subject to certain management measures the Council deems necessary to ensure stock sustainability. However, this is not expected to happen in the near future, as rebuilding is not possible without substantial international agreement about fishery management measures throughout the SE-NHR Seamount chain, which contains the full extent of the armorhead stock. Without international cooperation, rebuilding could be as long as or longer than 35 years (see Section 3.5.1).

The primary difference between this alternative (Alternative 3) and Alternative 1 is that this alternative would establish a time-indefinite fishing moratorium that would remain in place until the armorhead stock is shown to be rebuilt, whereas alternative 1 would establish a moratorium for six years. Given the ongoing fishing for armorhead by foreign fleets in international waters, four consecutive 6-year unilateral moratoria by the U.S. alone have been ineffective in rebuilding the stock.

Under this alternative, the Council would make recommendations about research priorities. Results of this research could be used facilitate the establishment of international conservation and management measures to effectively rebuild armorhead stock throughout its range. However, Council research recommendations are not part of the analyzed proposed action.

> ***Rationale:*** The Council chose alternative 3, to create the Hancock Seamounts Ecosystem Management Area, because it provides the most protection to armorhead and other seamount groundfish, as well as bottomfish, in the long term, while still allowing that in the future, there may be the possibility of fishing the area should the Council choose to pursue opening the area after a moratorium of at least 10 years. Additionally, because the area has not been fished in over 24 years, it provides a control site against which to compare fished seamounts, which may prove beneficial during international stock assessments of armorhead and other fishes.

2.3.1 Research Priorities for Hancock Seamounts Ecosystem Management Area

Research needs would include those identified in the Report of the 1st Meeting of the Scientific Working Group (NPRFMA 2007) that met January 29-30, 2007, in Korea, including: life history information about armorhead, ecological information such as food web dynamics and essential fish habitat, population dynamics information, and fishery independent information at the population level. Further research priorities identified by the Council are: habitat mapping and characterization, and distribution and abundance by habitat types. This information is necessary to determine whether the status and condition of the stock could support a domestic fishery opening at Hancock Seamounts in future years, although a focus over the extent of the range of armorhead, both foreign and within the U.S. EEZ, is mandatory to determine the status of the stock. These research priorities are Council recommendations; they are not part of the analyzed proposed action. Any research stemming from these priorities would require NEPA and ESA analyses during project development.

2.3.2 Monitoring

Observers were required from 1978-1984 on permitted fishing trips of foreign trawlers. The observers collected valuable information, including vessel characteristics, trawl net gear and associated equipment, bottom trawl net hauls, and biological data for armorhead, including fork lengths, weights, sex, and fatness type. Collecting this type of information can be very useful in terms of characterizing the fishery and collecting life history information, and therefore the Council may consider requiring observers again should a domestic armorhead fishery open within Hancock Seamounts EMA. 100% scientific observer coverage is already required on trawl fishing vessels of Japan and Russia that are fishing on the seamounts of the high seas. Observers are required for Korea (although exact amount of coverage is not specified) (NPRFMA 2009).

Logbooks are required in other U.S. fisheries throughout the Western Pacific, including the pelagics longline fishery and CNMI seamount groundfish fishery. Therefore, the Council may consider requiring logbooks on fishing trips to Hancock Seamounts should this fishery open in the future, at which point the appropriate NEPA, PRA, and other analyses would be performed.

2.3.3 Gear restrictions

Armorhead is primarily fished for via bottom trawl, and is also caught via bottom longline and bottom gillnet sets. Due to the rocky nature of the substrate and based on trawl net gear loss previously reported during research surveys, the Council could maintain the gear prohibition on bottom trawls should the fishery open to U.S. vessels at a later date. Additional gear restrictions that could remain in place are bottom gillnet, poisons, and explosives. These are regulations that are already in place and have had the appropriate NEPA and ESA analyses.

2.3.4 Temporal restrictions

There is currently a fishing restriction during spawning times of armorhead agreed to by the Participating States of the NPRFMA, including Russia, Japan, Korea, and the U.S. within the SE-NHR Seamounts. If the fishery is opened at Hancock Seamounts, the Council may elect to implement a temporal fishing restriction during all or part of the spawning time for armorhead (November through February). Currently, Japan and Russia close fishing during November and December, and Korea closes fishing from October 1 through December 31 (NPRFMA 2009). When armorhead is rebuilt, the Council may consider allowing fishing opportunities and could recommend temporal fishing restrictions at the Hancock Seamounts at which point appropriate NEPA, PRA and other analyses would be performed.

3.0 AFFECTED ENVIRONMENT

3.1 Hancock Seamounts Habitat

Hancock Seamounts is located within the northern Hawaiian Ridge, approximately 2500 km northwest of Honolulu. The primary Hancock Seamounts consists of two guyots (flat-topped seamounts; Figure 3), the Northwest and Southeast Hancock Seamounts, approximately two km in diameter and at 265 m depth, and a deeper peaked summit known as “K Bank” (Humphreys 2009). The seabeds are rough and rocky, causing gear hang-ups and gear loss, making it a difficult area to conduct bottom trawl surveys and thus difficult to estimate armorhead biomass (Yanagimoto 2009). Hancock Seamounts may support a highly productive ecosystem and is known to be an excellent fishing ground for pelagics such as tuna, as well as armorhead and other eipbenthic species (Brainard 1986). However, a review of U.S foreign observer data obtained on Japanese trawlers and PIFSC scientific resource investigations on seamounts of the SE-NHR suggests that the commercially important snapper-grouper complex may be absent from Hancock Seamounts and other seamounts extending to the north (Humphreys et al. 1984). Hancock Seamounts is thought to have contained about ten percent of the armorhead population, estimated in the early 1970s to be as high as 400,000 MT for all seamounts (Boretz 1975; Brainard 1986), and accounted for about 10% of the cumulative catch from 1969-1981.

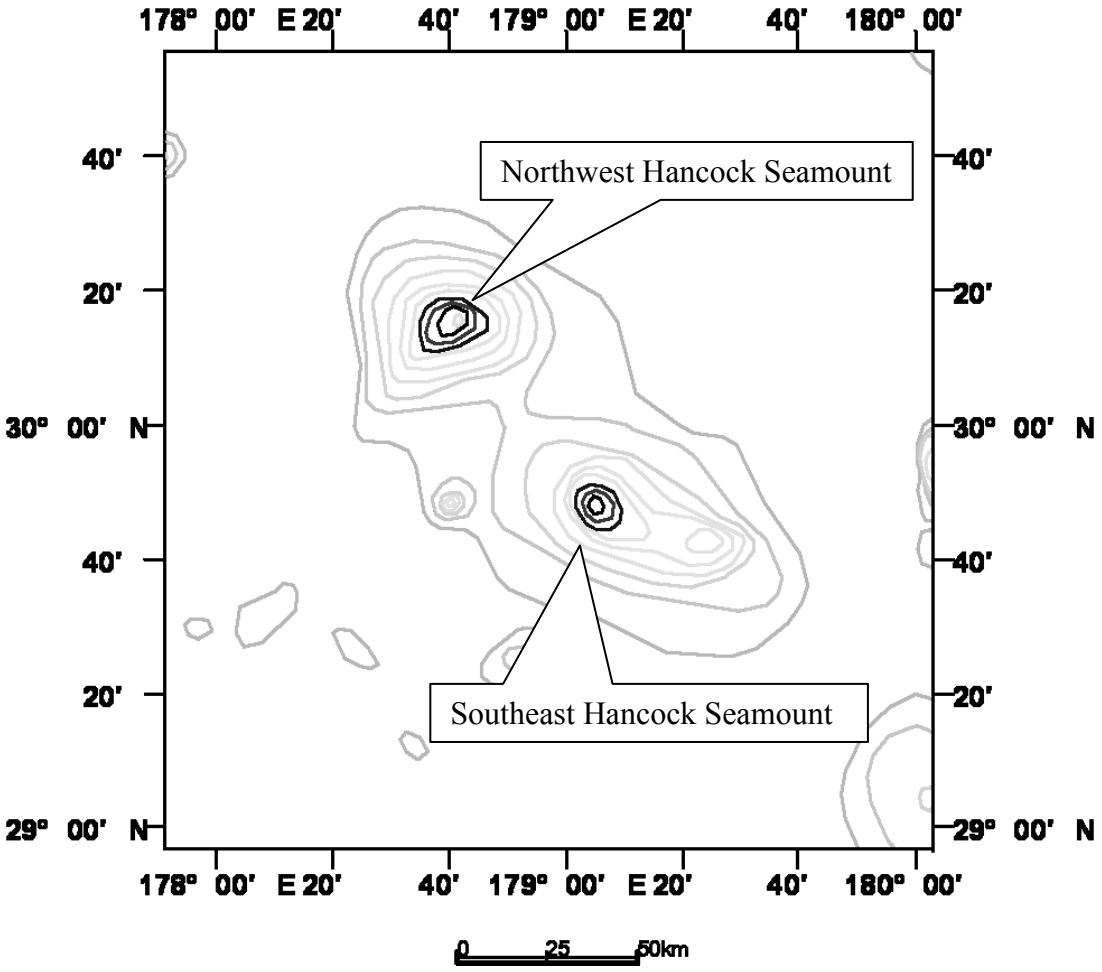

Figure 3. Hancock Seamounts are composed of two main north and south guyots. The Hancock Seamounts fishing grounds consist of two guyots (Northwest and Southeast Hancock) and one peaked seamount known as "K Bank."

3.2 Hawai`i Bottomfish and Seamount Groundfish Fisheries

The deep-slope bottomfish fishery in Hawaii concentrates on species of eteline snappers (e.g., opakapaka), carangids (e.g., jacks), and a single species of grouper (hapuupuu) concentrated at depths of 30–150 fathoms or 60–300 meters (WPFMC 2009). There has never been a domestic fishery targeting armorhead or any species of seamount groundfish in the U.S. EEZ of the Hawaiian Archipelago. Table 1 lists bottomfish and seamount groundfish species managed under the Hawaiian Archipelago FEP.

Until recently, the fishery was divided into two geographical areas: (a) the inhabited main Hawaiian islands (MHI) with their surrounding reefs and offshore banks and the (b) Northwestern Hawaiian Islands (NWHI), a 1,200-nautical mile chain of largely uninhabited islets, reefs, and shoals. As of 2010, the NWHI bottomfish fishery is no longer operational.

Proclamation 8031, which established the Papahanaumokuakea Marine National Monument, allowed the NWHI bottomfish fishery to operate until June 15, 2011. However, in 2008, Congress authorized funding for compensation to fishers who voluntarily relinquished their federal fishing permits and directed the Secretary of Commerce to initiate a voluntary capacity reduction program (74 FR 47119, September 15, 2009)). In December 2009, all NWHI bottomfish federal permit holders accepted compensation and have voluntarily surrendered their permits to NMFS. Therefore, there is no permissible fishing for bottomfish in the NWHI, including Hancock Seamounts, although the Council is considering various actions that would provide for bottomfishing fishing opportunities outside the boundaries of the monument and the proposed Hancock Seamounts EMA.

Table 1. Hawai`i Archipelago Bottomfish Management Unit Species (BMUS)

Common Name	Local Name	Scientific Name
Bottomfish		
Silver jaw jobfish	lehi	*Aphareus rutilans*
Grey jobfish	uku	*Aprion virescens*
Giant trevally	white ulua	*Caranx ignoblis*
Black jack	black ulua	*Caranx lugubris*
Sea bass	hapu‘upu‘u	*Epinephelus quernus*
Red snapper	ehu	*Etelis carbunculus*
Longtail snapper	onaga, ulaula	*Etelis coruscans*
Blue stripe snapper	ta‘ape	*Lutjanus kasmira*
Yellowtail snapper	yellowtail, kalekale	*Pristipomoides auricilla*
Pink snapper	opakapaka	*Pristipomoides filamentosus*
Pink Snapper	kalekale	*Pristipomoides sieboldii*
Snapper	gindai	*Pristipomoides zonatus*
Thick lipped trevally	pig ulua, butaguchi	*Pseudocaranx dentex*
Amberjack	kāhala	*Seriola dumerili*
Seamount groundfish		
Alfonsin	NA	*Beryx splendens*
Raftfish/butterfish	NA	*Hyperoglyphe japonica*
Armorhead	NA	*Pseudopentaceros wheeleri*

3.2.1 Overview of the Hancock Seamounts Fishery

There is no domestic or foreign fishery at Hancock Seamounts currently; there was never a domestic fishery for bottomfish, seamount groundfish, or precious corals. However, prior to the moratorium from 1978-1984, the U.S. administered a permit fishery to Japanese trawlers to harvest armorhead at Hancock Seamounts. The fishery never attained its total annual quota of 1,000 mt and the moratorium was implemented in 1986.

3.3 Target and Non-Target Species

The potential target species for a domestic fishery is armorhead and alfonsin; butterfish, scorpionfish, and other fishes are potential non-target species. Armorhead was the primary target of foreign fleets prior to the moratorium at Hancock Seamounts and is still the primary

target of foreign fleets throughout the SE-NHR Seamounts. Alfonsin has become a secondary target species since armorhead catches declined after 1976.

Armorhead undergo an initial 2+ year pre-recruit pelagic phase in the temperate and subarctic North Pacific. They then return at full size to the SE-HNR seamounts, including Hancock Seamounts, in late spring-early summer. After recruitment to the seamounts, armorhead cease somatic growth, but develop reproductively. They spawn annually during November-December, surviving 4-5 years at the seamounts. They become emaciated during their time at the seamounts and therefore, annual increases in biomass at the seamounts are solely dependent on new recruitment.

3.4 Bycatch Species

Due to the moratorium on the Hancock Seamounts for over 20 years, there has been no domestic fishery and therefore no bycatch. Potential bycatch species associated with the SE-NHR Seamounts bottom trawl fisheries (which is a prohibited gear in the U.S. EEZ under the Hawai`i FEP), that have that have been caught by Japanese, Korean, and Russian trawlers are Japanese boarfish (*Pentaceros japonicus*), broad alfonsin (*Beryx decadactylus*), Japanese butterfish (*Hyperoglyphe japonica*), mirror dory (*Zenopsis nebulosa*), skilfish (*Erilepis zonifer*), boarfishes (*Antigonia* spp.), cardinalfish (*Epigonus* spp.), snake mackerel (*Promethichthys prometheus*), morid cods (Moridae), and squalid shards and scorpionfishes (Sebastidae and *Helicolenus* spp.) (Sasaki 1986 and FAJ 2008 as quoted in NPRFMO 2008).

3.5 Stock Status

The Hawai`i FEP defines recruitment overfishing for bottomfish as a condition in which the ratio of the current spawning stock biomass proxy (CPUE scaled by the percent mature fish in the catch) for a specific species to a given reference level drops below the limit specified for that species. The 1996 reauthorization of the Magnuson-Stevens Act by the Sustainable Fisheries Act contained new requirements for monitoring potential overfishing. Under Magnuson-Stevens Act National Standard 1 guidelines, armorhead at the Hancock Seamounts are still overfished. However, the other two seamount groundfish (alfonsin and raftfish) and the bottomfish stocks are not overfished or experiencing overfishing.

After discovery of the armorhead stock over the SE-NHR Seamounts by a Soviet trawler in 1967 (Baytalyuk and Katugin 2009), Soviet and Japanese trawlers fished pelagic armorhead through its peak in 1973. The U.S. administered permits to foreign trawlers to fish armorhead at the Hancock Seamounts from 1978-1984 with U.S. observers on board. The fishery never attained its annual armorhead quota and the program was discontinued in 1984. A 6-year moratorium on fishing for all groundfish and seamount groundfish was subsequently implemented at Hancock Seamounts in 1986 to restore depleted armorhead stocks. A second six year moratorium was implemented in 1992; after periodic reviews indicated no recovery had occurred, armorhead was listed as overfished in the September 1997 “Report to Congress Status of Fisheries of the United States” and continues to remain in that condition.

Although there are no current data for Hancock Seamounts, a series of stock assessment research cruises from 1985-1993 was conducted on the armorhead stock at Southeast Hancock Seamount. The data collected were used to create frequency distributions of fatness index in order to track

recruitment cohorts over time within the Southeast Hancock population of armorhead. Research plans are being established by the NPRFMA that seek to update stock assessments throughout the armorhead range of the SE-NHR Seamounts chain, including Hancock Seamounts.

3.5.1 Specification of Rebuilding Time

The armorhead fishery is currently considered to be in an overfished condition and has been subject to four consecutive 6-year fishing moratoria at Hancock Seamounts totaling 24 years. Thus, the armorhead stock is still in rebuilding. Pursuant to the MSA, the Council is required to recommend conservation and management measures to rebuild overfished stocks and specify a time period for rebuilding the stock that is short as possible (T_{min}), taking into account the status and biology of the stock, needs of the fishing communities, recommendations by international organizations in which the United States participates, and the interaction of the overfished stock within the marine ecosystem. Since the moratorium was implemented, there have been only two major recruitment events in 1992 and 2004 (Humphreys PIFSC 2009 pers. comm.). It is suggested that perhaps the combination of low stock size and unidentified environmental influences have contributed to the sparse episodic recruitment. Based on the long-term low stock size of armorhead and the uncertainty of future recruitments that could rebuild the stock, a T_{min} of 35 years has been determined based on five generation times and the assumption of a 7-year lifespan for armorhead (Humphreys 2009; although there is disagreement about 7 versus 11 years, NPRFMO 2008).

As previously noted in Section 1.0, less than five percent of armorhead habitat lies within waters under U.S. jurisdiction which limits the ability of the United States to unilaterally effectuate significant rebuilding of the stock. Thus, it will take further international agreement and cooperation to fully rebuild the armorhead stock throughout its range. However, the proposed moratorium on fishing within the Hancock Seamounts EMA ensures U.S. fishermen do not contribute to overfishing and delay rebuilding of the stock. The previous four moratoria have prohibited fishing on the Hancock Seamounts for the past 24 years and provided a control site against which to assess armorhead population and habitats of other seamounts on the high seas. Work of the Participating States within the NPRFMA to conduct an armorhead stock assessment and the development of appropriate management measures based on the outcome of the assessment will provide much-needed international support for the rebuilding of the armorhead stock throughout its range. Of note is that management measures developed by the NPRFMA could supersede management measures implemented under the MSA.

3.6 Protected Species

Protected species generally include sea turtles, marine mammals and seabirds. The Final Supplemental Environmental Impact Statement prepared in association with Amendment 14 to the Bottomfish FMP contains detailed biological information on species listed under the Endangered Species Act (ESA) (WPRFMC 2007). Additional information is available in two Biological Opinions prepared by NMFS under section 7 of the ESA (NMFS 2002; NMFS 2008a). There is no information available on the presence of protected species at Hancock Seamounts. There has never been a domestic fishery for armorhead on the Hancock Seamounts. Furthermore, the use of bottom trawl gear, like the type employed by foreign armorhead fishing fleets is prohibited under the Hawaii Archipelago FEP. Therefore, hook and line fishing method similar to the type used in Hawaii bottomfish fishery is the only plausible gear type that could be

used to harvest armorhead and other seamount groundfish. For these reasons, information from bottomfish fisheries in the MHI and NWHI is presented here as a proxy for a seamount groundfish fishery.

Marine Mammals

Cetaceans listed as endangered under the ESA and that have been observed in the Western Pacific Region are the humpback whale (*Megaptera novaeangliae*), sperm whale (*Physeter macrocephalus*), blue whale (*Balaenoptera musculus*), fin whale (*B. physalus*), and sei whale (*B. borealis*). The 2002 Biological Opinion (NMFS 2002) stated that there have been no reported or observed incidental takes of these species in the history of the bottomfish fishery and based on a dearth of sightings/observations of these species, the probability of an encounter with the bottomfish fishery is extremely low. Although uncommon, the northern elephant seal (*Mirounga angustirostris*) has been occasionally observed in waters around the Hawaii Archipelago. The Hawaiian monk seal is the only endemic pinniped in Hawaii that is listed as endangered under the ESA, but due to the distance from land and depth, Hawaiian monk seals are not believed to occur around the Hancock Seamounts. Critical habitat for the Hawaiian monk seal includes ocean waters out to 20 fathoms deep (NMFS 2002), or 37m, and the depth of Hancock is 265 m. Further, the 2002 Opinion stated that the bottomfish fishery is not likely to jeopardize the continued existence of the Hawaiian monk seal or result in the destruction or adverse modification of its critical habitat.

According to the Papahānaumokuākea Management Plan (PMNM 2008), only three other cetaceans reside in the NWHI that are not listed under the MSA – North Pacific right whale, spinner dolphin, and the bottlenose dolphin. However, due to the proximity of the NWHI to the MHI, the following list is included of marine mammals that are not listed under the ESA that occur in the MHI:

Whales:
Blainsville beaked whale (*Mesoplodon densirostris*)
Bryde's whale (*Balaenoptera edeni*)
Cuvier's beaked whale (*Ziphius cavirostris*)
Dwarf sperm whale (*Kogia simus*)
False killer whale (*Pseudorca crassidens*)
Killer whale (*Orcinus orca*)
Longman's beaked whale (*Indopacetus pacificus*)
Melon-headed whale (*Peponocephala electra*)
Minke whale (*Balaenoptera acutorostrata*)
Pygmy killer whale (*Feresa attenuata*)
Pygmy sperm whale (*Kogia breviceps*)
Short-finned pilot whale (*Globicephala macrorhynchus*)

Dolphins
Bottlenose dolphin (*Tursiops truncatus*)
Dall's porpoise (*Phocoenoides dalli*)
Fraser's dolphin (*Lagenodelphis hosei*)
Risso's dolphin (*Grampus griseus*)

Rough-toothed dolphin (*Steno bredanensis*)
Spinner dolphin (*Stenella longirostris*)
Spotted dolphin (*Stenella attenuata*)
Striped dolphin (*Stenella coeruleoalba*)

Both the MHI and NWHI bottomfish fisheries are listed as Category III fisheries under Section 118 of the MMPA (74 FR 58859). A Category III fishery is one with a low likelihood or no known incidental takings of marine mammals. NMFS has also concluded that the Hawaii Archipelago commercial bottomfish fisheries will not affect marine mammals in any manner not considered or authorized under the Marine Mammal Protection Act.

Sea Turtles
The breeding populations of Mexico's olive ridley sea turtles (*Lepidochelys olivacea*) are currently listed as endangered, while all other ridley populations are listed as threatened. Leatherback sea turtles (*Dermochelys coriacea*) and hawksbill turtles (*Eretmochelys imbricata*) are also classified as endangered. Loggerhead (*Caretta caretta*) and green sea turtles (*Chelonia mydas*) are listed as threatened (the green sea turtle is listed as threatened throughout its Pacific range, except for the endangered population nesting on the Pacific coast of Mexico). These five species of sea turtles are highly migratory, or have a highly migratory phase in their life history (NMFS 2001). The green turtle is the only species regularly seen in EEZ waters around Hawaii.

NMFS has determined that although sea turtles may be found within the waters of the Hawai`i Archipelago and could interact with the bottomfish fishery, there have been no reported or observed interactions with sea turtles in the history of the bottomfish fishery (NMFS 2002; NMFS 2008a). Hawksbill, leatherback and olive ridley turtles are likely to be rare in the action area. NMFS concluded that the bottomfish fishery is not likely to adversely affect hawksbill, leatherback, loggerhead or olive ridley turtles. The 2008 Opinion noted that green turtles are sometimes killed by collisions with vessels around the MHI and is likely responsible for killing up to two green sea turtles per year. The resulting mortality is not likely to jeopardize the species because green sea turtles have been rapidly increasing in numbers in recent years when bottomfishing was occurring at a higher level of effort [than the current fishery], and they are extremely unlikely to be hooked or entangled by bottomfishing gear (NMFS 2008a).

Seabirds
Seabirds listed as threatened or endangered under the ESA are managed by the USFWS. The short-tailed albatross, which is listed as endangered under the ESA, is a migratory seabird that is known to be occasionally present in the NWHI. No interactions between seabirds and the MHI bottomfish fishery have been observed or reported. Other listed seabirds found in the region are the endangered Hawaiian petrel (*Pterodroma phaeopygia)* and the threatened Newell's shearwater (*Puffinus auricularis newelli*). Non-listed seabirds known to be present are the black-footed albatrosses (*Phoebastria nigripes*); Laysan albatross (*P. immutabilis*); wedge-tailed (*Puffinus pacificus*), sooty (*P. griseus*) and fleshfooted (*P. carneipes*) shearwaters, as well as the masked booby (*Sula dactylatra*), brown booby (*Sula leucogaster*), and red-footed booby *(Sula sula*). Most of these seabirds forage far from the islands and are unlikely to interact with the bottomfish fishery. In addition, bottomfish fishing gear is deployed close to the vessel and does not afford much opportunity for seabirds to attack the bait. When bottomfish fishing a weighted

mainline is dropped vertically over the side of the vessel and it sinks rapidly beyond the range of a diving seabird. It is retrieved rapidly using electric or hydraulic pullers. The time that bait is within the range of a diving seabird is quite limited and the proximity of the vessel hull is a significant deterrent.

Protected Species Interactions

The 1990–1993, NMFS' observer program for the NWHI bottomfish fishery reported a moderate level of interactions between seabirds and the bottomfish fishery, with Laysan and black-footed albatrosses described as aggressively stealing bait from hooks during deployment and retrieval of bottomfish gear, causing lost fishing time (Nitta 1999). Birds were reported as being easily scared away from handlines by waving a pole or gaff. No seabird injuries or mortalities were observed while fishermen were fishing for bottomfish.[1] Although there is a possibility of accidental hooking, the circle hooks used in the bottomfish fishery do not lend easily to incidental hooking of seabirds. One interaction involving a Laysan albatross occurred while a bottomfish fishing vessel was trolling for pelagic species. The bird became hooked, but was subsequently released.

The NWHI vessel observer program was renewed in October 2003, with observer coverage averaging 22 percent during 2004-2005. During the 2004-2005 time period a total of 26 trips carried observers. No interactions with sea turtles, monk seals, whales or other marine mammals, or endangered seabirds were observed. Eight interactions with seabirds were observed across six trips. Six of the interactions occurred during trolling operations and two during bottomfishing operations. Seven of the eight interactions were with boobies, the remainder was with a Laysan albatross during trolling operations (PIRO Observer Program Bottomfish Annual Report webpage accessed August 2010). It is believed that all eight interactions were non-lethal and the seabirds were released alive.

Fishermen have reported that other species of birds, particularly juvenile boobies (*Sula* spp.), dive on trolling lures (Nitta and Henderson 1993). The potential for the bottomfish fishery to cause adverse impacts on seabirds due to competition for prey is negligible, as seabirds do not prey on bottomfish species. The potential for other ecosystem links between the bottomfish fishery and seabirds is unknown, however the level of fishery interactions with seabirds is expected to have no effect on seabird distribution, survival, or population structure (WPRFMC 2007).

During the vessel observer program conducted in the NWHI bottomfish fishery from 1990 through 1993, an average of 2.67 dolphin-damaged fish per 1,000 fish caught was also observed (Kobayashi and Kawamoto 1995). The impact of the bottomfish fishery on the behavior or foraging success of bottlenose dolphins is unknown, but is not believed to be adverse.

Following consultations under section 7 of the ESA, NMFS has determined that the bottomfish fisheries will not jeopardize any ESA-listed species or critical habitat in the Hawaii Archipelago.

[1] Although Nitta (1999) defined an interaction to mean instances in which an animal is "caught or entangled," the report's statement that "many interactions" with albatrosses were observed appears to refer to instances in which the seabirds were not actually caught or entangled (as none were injured).

3.7 Essential Fish Habitat and Habitat Areas of Particular Concern

Essential fish habitat (EFH) is defined as those waters and substrate as necessary to fish for spawning, breeding, feeding, and growth to maturity. This includes the marine areas and their chemical and biological properties that are utilized by the organism. Substrate includes sediment, hard bottom, and other structural relief underlying the water column along with their associated biological communities. In 1999, the Council developed and NMFS approved EFH definitions for management unit species (MUS) of the Bottomfish and Seamount Groundfish FMP (Amendment 6), Crustacean FMP (Amendment 10), Pelagic FMP (Amendment 8), and Precious Corals FMP (Amendment 4) (74 FR 19067, April 19, 1999). Additional EFH definitions for coral reef ecosystem species were approved by NMFS in 2004 as part of the implementation of the Coral Reef Ecosystem FMP 2004 (69 FR8336, February 24, 2004). EFH definitions were approved for deepwater shrimp through an amendment to the Crustaceans FMP in 2008 (73 FR 70603, November 21, 2008). Ten years later in 2009, the Council developed and NMFS approved five new archipelagic-based fishery ecosystem plans (FEP), including the Hawaii Archipelago FEP. The FEP incorporated and reorganized elements of the Councils' species-based FMPs into a spatially-oriented management plan (75 FR 2198, January 14, 2010). As a result, EFH definitions and related provisions for all FMP fishery resources are subsequently carried forward into the respective FEPs. The Council is currently developing an amendment to the Hawaii FEP that would refine the definitions for bottomfish and seamount groundfish. Therefore, these EFH designations may change if recommended by the Council, and approved by NMFS.

In addition to and as a subset of EFH, the Council described habitat areas of particular concern (HAPC) based on the following criteria: ecological function of the habitat is important, habitat is sensitive to anthropogenic degradation, development activities are or will stress the habitat, and/or the habitat type is rare. In considering the potential impacts of a proposed fishery management action on EFH, all designated EFH must be considered. Hancock Seamounts falls within the EFH listed for seamount groundfish eggs, larvae, juvenile, and adults, which is 29-35^{o}N and 171^{o}E to 171^{o}W. The designated areas of EFH and HAPC for all western Pacific fishery resources by life stage are summarized in Table 3.

Weighted lines or baited hooks may rest on the bottom substrate during bottomfish fishing operations, and may impact substrate EFH and HAPC. Lost bottomfish fishing gear, including anchors and anchors lines, have the potential to impact the substrate. Research conducted in NWHI bottomfish fishing sites found low counts of this type of fishing debris (Raita and St. Rogatien Banks) (Kelley and Moffitt 2004).

No adverse effects to water column EFH and HAPC have been attributed to bottomfish fishing in Hawaii (G. Davis, PIRO, personal communication). Some have theorized that sending a weighted handline with baited hooks and a small chum bag to bottom depths, generally to 50 fathoms and below, may introduce parasites or disease into the water column, but to date no such problems have been reported or documented in Hawaii's bottomfish fisheries (Kelley and Moffitt 2004).

The use of explosives, poisons, trawl nets, and other destructive gears that may adversely affect EFH and HAPC is prohibited under the Hawaiian Archipelago FEP.

Table 3. EFH and HAPC for all Western Pacific FEPs

	Species Complex	EFH	HAPC
Bottomfish and Seamount Groundfish	**Shallow-water species (0–50 fm):** uku (*Aprion virescens*), thicklip trevally (*Pseudocaranx dentex*), giant trevally (*Caranx ignoblis*), black trevally (*Caranx lugubris*), amberjack (*Seriola dumerili*), taape (*Lutjanus kasmira*)	**Eggs and larvae:** the water column extending from the shoreline to the outer limit of the EEZ down to a depth of 400 m (200 fm). **Juvenile/adults:** the water column and all bottom habitat extending from the shoreline to a depth of 400 m (200 fm)	All slopes and escarpments between 40–280 m (20 and 140 fm) Three known areas of juvenile opakapaka habitat: two off Oahu and one off Molokai
	Deep-water species (50–200 fm): ehu (*Etelis carbunculus*), onaga (*Etelis coruscans*), opakapaka (*Pristipomoides filamentosus*), yellowtail kalekale (*P. auricilla*), kalekale (*P. sieboldii*), gindai (*P. zonatus*), hapuupuu (*Epinephelus quernus*), lehi (*Aphareus rutilans*)	**Eggs and larvae:** the water column extending from the shoreline to the outer limit of the EEZ down to a depth of 400 m (200 fathoms) **Juvenile/adults:** the water column and all bottom habitat extending from the shoreline to a depth of 400 meters (200 fm)	All slopes and escarpments between 40–280 m (20 and 140 fm) Three known areas of juvenile opakapaka habitat: two off Oahu and one off Molokai

	Species Complex	EFH	HAPC
	Seamount groundfish species (50–200 fm): armorhead (*Pseudopentaceros wheeleri*), raftfish/butterfish (*Hyperoglyphe japonica*), alfonsin (*Beryx splendens*)	**Eggs and larvae:** the (epipelagic zone) water column down to a depth of 200 m (100 fm) of all EEZ waters bounded by latitude 29°–35° **Juvenile/adults:** all EEZ waters and bottom habitat bounded by latitude 29°–35° N and longitude 171° E–179° W between 200 and 600 m (100 and 300 fm)	No HAPC designated for seamount groundfish
Crustaceans	**Spiny and slipper lobster complex:** Hawaiian spiny lobster (*Panulirus marginatus*), spiny lobster (*P. penicillatus, P.* spp.), ridgeback slipper lobster (*Scyllarides haanii*), Chinese slipper lobster (*Parribacus antarcticus*) **Kona crab :** Kona crab (*Ranina ranina*)	**Eggs and larvae:** the water column from the shoreline to the outer limit of the EEZ down to a depth of 150 m (75 fm) **Juvenile/adults:** all of the bottom habitat from the shoreline to a depth of 100 m (50 fm)	All banks in the NWHI with summits less than or equal to 30 m (15 fathoms) from the surface
	Deepwater shrimp (*Heterocarpus* spp.)	**Eggs and larvae:** the water column and associated outer reef slopes between 550 and 700 m **Juvenile/adults:** the outer reef slopes at depths between 300-700 m	No HAPC designated for deepwater shrimp.

	Species Complex	EFH	HAPC
Precious Corals	**Deep-water precious corals (150–750 fm):** Pink coral (*Corallium secundum*), red coral (*C. regale*), pink coral (*C. laauense*), midway deepsea coral (*C.* sp nov.), gold coral (*Gerardia* spp.), gold coral (*Callogorgia gilberti*), gold coral (*Narella* spp.), gold coral (*Calyptrophora* spp.), bamboo coral (*Lepidisis olapa*), bamboo coral (*Acanella* spp.) **Shallow-water precious corals (10-50 fm):** black coral (*Antipathes dichotoma*), black coral (*Antipathis grandis*), black coral (*Antipathes ulex*)	EFH for Precious Corals is confined to six known precious coral beds located off Keahole Point, Makapuu, Kaena Point, Wespac bed, Brooks Bank, and 180 Fathom Bank EFH has also been designated for three beds known for black corals in the Main Hawaiian Islands between Milolii and South Point on the Big Island, the Auau Channel, and the southern border of Kauai	Includes the Makapuu bed, Wespac bed, Brooks Banks bed For Black Corals, the Auau Channel has been identified as a HAPC
Coral Reef Ecosystems	**All Currently Harvested Coral Reef Taxa** **All Potentially Harvested Coral Reef Taxa**	EFH for the Coral Reef Ecosystem MUS includes the water column and all benthic substrate to a depth of 50 fm from the shoreline to the outer limit of the EEZ	Includes all no-take MPAs identified in the CRE-FMP, all Pacific remote islands, as well as numerous existing MPAs, research sites, and coral reef habitats throughout the western Pacific

3.8 Economic Setting

Hawaii's economy is dominated by tourism and defense, with tourism being the leading industry in terms of employment and expenditures. The two represent approximately one quarter of Gross State Product (GSP) without consideration of ancillary services and also comprise the largest shares of "export" earnings. However, including retirement and disability payments, grants, contracts, other payments, and wages and salaries, total Federal expenditures in Hawaii were $13.5 billion in 2006 (DBEDT 2007), about 22 percent of GSP. Please see the Final Supplemental Impact Statement prepared in association with Amendment 14 to the Bottomfish FMP (WPRFMC 2007) for information on Hawaii's economy. Additional information is available in an Environmental Assessment prepared by NMFS in association with the implementation of the 2008-2009 MHI TAC (NMFS 2008b).

4.0 IMPACTS OF ALTERNATIVES

4.1 Impacts on Target and Non-Target Stocks

4.1.1 Alternative 1: Six Year Moratorium (No Action)

Under Alternative 1, there will be no impacts to target and non-target stocks as domestic fishing for armorhead, other seamount groundfish and bottomfish would continue to be prohibited for another 6 years under this alternative. The overfished status of pelagic armorhead at the Hancock Seamounts would be expected to continue unless coordinated and effective international management measures were adopted for the international segment of the stock on the SE-NHR Seamount chain. If stock recovery were to occur as a result of coordinated international management efforts, U.S. domestic fishing for seamount groundfish on Hancock Seamounts would be prohibited until 2016, at which time management measures for a sustainable domestic fishery in U.S. waters would be considered. This site would continue to provide a control site against which to measure fishing impacts on other seamounts during the 6 years of the moratorium.

4.1.2 Alternative 2: Expiration of the Six Year Moratorium

Under Alternative 2, the moratorium on groundfish fishing at Hancock Seamounts would end in August 2010. There would be no immediate impact on target and not target stocks associated with this alternative because it is unlikely that any domestic fishery could immediately benefit from the end of the moratorium. With respect to armorhead and other seamount groundfish, these species are primarily harvested using bottom trawl gear. However, bottom trawls are a prohibited gear type under the Hawaii FEP. Hook and line methods, similar to those used in the Hawaii bottomfish fishery could possibly be employed to harvest seamount groundfish. However, due to the remoteness of the area it is unlikely that the investment in gear and fuel would be worth the returns on such a fishery unless other species such as bottomfish were also fished. In addition, because armorhead is overfished, any fishing would be immediately subject to an annual catch limit (ACL). The Council is currently developing through a separate action, ACLs for all western Pacific stocks, including overfished armorhead. Given that there has never been a domestic fishery for armorhead, and the stock was overfished exclusively by foreign fishing fleets prior to 1976, it is unlikely that an ACL would be established at a level that would support an economically viable fishery unless coordinated and effective international management measures are adopted for the international segment of the stock located on the adjacent SE-NHR Seamount chain.

With respect to bottomfish, a review of U.S foreign observer data obtained on Japanese trawlers and PIFSC scientific resource investigations on seamounts of the SE-NHR suggests that the commercially important snapper-grouper complex may be absent from Hancock Seamounts and other seamounts extending to the north (Humphreys et al., 1984). Therefore, it is unlikely that there would any impacts to bottomfish stocks associated with this alternative, immediately or in the long term.

4.1.3 Alternative 3: Hancock Seamounts Ecosystem Management Area (preferred alternative)

This alternative is expected to have neutral or positive impacts on target and non target stocks as the fishing moratorium would be extended until the stock is no longer overfished. Compared to Alternative 1, this alternative is expected to improve the long term management of bottomfish and seamount groundfish at Hancock Seamounts because it would also establish the area as an ecosystem management area (EMA) which could serve as a monitoring and research site to undertake ecological studies on bottomfish and seamount groundfish and their associated benthic habitats communities. Additionally, the Hancock Seamounts EMA could also serve as a control site for future research that may be conducted to assess the effectiveness of management actions being considered by the Participating States of the NPRFMA, such as seasonal closures and bank-specific closures in adjacent international waters.

The establishment of the Hancock Ecosystem EMA, coupled with a time-indefinite fishing moratorium and the establishment of a minimum rebuilding time for armorhead is intended to effectively rebuild the armorhead stock and demonstrate U.S. commitment to other Participating States in achieving this goal. Additionally, Council recommended research priorities associated with this alternative. Although not part of scope of the federal action, these recommendations are intended to obtain information to develop, and promote development of, management measures that would support a sustainable domestic fishery in U.S. waters and support management of this stock in adjacent international waters.

4.2 Impacts on Bycatch Species

4.2.1 Alternative 1: Six Year Moratorium (No Action)

There would be no impact on bycatch species associated with this alternative, other than to provide protected habitat because no fishing would be allowed at Hancock Seamounts for the next six years.

4.2.2 Alternative 2: Allow Expiration of the Six Year Moratorium

Under Alternative 2, fishing would be allowed beginning in 2010. If such activity were to occur there could be bycatch (i.e. discards; species identified in section 3.4) associated with any initiated fishery, although the impacts are expected to be low because the desirability and feasibility of entering a fishery at Hancock Seamounts is very low due to the implementation of the Papahānaumokuākea Monument, the prohibition on trawling, the distance from other fishing grounds, and the difficulty in entering the fishery.

4.2.3 Alternative 3: Hancock Seamounts Ecosystem Management Area (preferred alternative)

There would be no impact on bycatch species associated with this alternative other than to provide protected habitat, until the armorhead stock has been determined to be rebuilt.

4.3 Impacts on Protected Species

4.3.1 Alternative 1: Six Year Moratorium (No Action)

There would be no impact on protected species associated with Alternative 1, other than to provide protected habitat because no fishing would be allowed for the next six years.

4.3.2 Alternative 2: Expiration of the Six Year Moratorium

Under Alternative 2, fishing may begin, which could result in interactions of fisheries with protected species around Hancock Seamounts. However, based on NMFS observer program reports for the NWHI bottomfish fishery, few or no interactions with protected species are expected to occur in the seamount groundfish or bottomfish fishery because no seabird injuries or mortalities were observed while fishermen were bottomfish fishing, and no interactions with sea turtles, monk seals, whales, or other marine mammals were observed.

4.3.3 Alternative 3: Hancock Seamounts Ecosystem Management Area (preferred alternative)

There would be no impact on protected species associated with this alternative, other than to provide protected habitat until the armorhead stock is shown to be rebuilt. At that point, the Council would reevaluate Hancock Seamounts EMA management strategies.

4.4 Impacts on Marine Habitat, EFH, and HAPC

There was never a domestic fishery at Hancock Seamounts, but there may be an opportunity for one to start with the lifting of the moratorium. Thus, under Alternative 2, which would allow the moratorium to expire, there may be potential negative impacts on marine habitat, EFH, and HAPC should fishing begin. Lost bottomfish gear, including anchors and anchor lines, have the potential to impact the substrate, and weighted lines or baited hooks may rest on the bottom substrate during bottomfish fishing, which could impact the substrate EFH and HAPC. No adverse effects to the water column EFH and HAPC have been attributed to bottomfishing, thus none are expected if a fishery were to begin at the Hancock Seamounts.

Under alternatives 1 and 3, either an extension of the moratorium for another six years or the creation of an ecosystem management area that continues the moratorium indefinitely, there would be no impacts to habitat, EFH, and HAPC at Hancock Seamounts because no fishing would be allowed.

4.5 Impacts on Fishery Participants and Fishing Communities

Under Alternative 2 that would allow the moratorium to expire at Hancock Seamounts, the fishery participants would be afforded the opportunity to begin fishing should they so desire, thus there may be a potential positive impact on fishery participants. However, due to the overfished status of the fishery, this positive impact would be minimal at best due to probable low catch rates. Additionally, the likelihood of a new Hawaii-based domestic armorhead fishery developing is remote due to the relatively small and isolated fishing area as well as the costs of entering this fishery. Existing domestic North Pacific trawl vessels could not consider pulse fishing on Hancock Seamounts because trawl fishing is not allowed in the U.S. EEZ managed by the Council. U.S. North Pacific trawls can fish the SE-NHR Seamounts that are not in the U.S. jurisdiction, however there is no and has never been any U.S. North Pacific commercial trawling

of the SE-NHR Seamounts; they are primarily fished by the Russian, Korean, and Japanese fleets.

Under Alternatives 1 and 3, there would be no impact to the communities because there has never been a domestic fishery at Hancock Seamounts and this would continue until the moratorium is potentially lifted after 6 years, or after the NMFS determines the stock is rebuilt and Council recommends fishing be allowed within the Hancock Seamounts EMA.

4.6 Cumulative Impacts

The Council on Environmental Quality's regulations for implementing NEPA defines cumulative effects as the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions (40 CFR 1508.7 and 1508.25). The intent of the cumulative effects analysis is to capture the total effects of many actions over time that would be missed by evaluating each action individually.

The preferred alternative (alternative 3), as well as alternative 1 (extension of moratorium), is designed to protect the armorhead stock against fishing mortality so that the armorhead stock may have a chance to rebuild. The individually insignificant impacts of maintaining the fishery closure at Hancock Seamounts would not become significant when considered along with other actions or conditions that are affecting the Hawaii FEP. The closures considered here are not expected to result in cumulatively significant adverse impacts when considered in conjunction with past, present, or anticipated future actions by NMFS or other entities.

Alternative 2 is also not expected to have cumulative significant adverse impacts because, although a fishery may open briefly, there will more than likely be low catch rates associated with significant cruising time to the fishing grounds. Thus, any fishery at Hancock Seamounts will more than likely not continue for a length of time that would result in adverse impacts.

4.7 Impacts on Administration and Enforcement

There is no foreseen change in the required enforcement for Hancock Seamounts under Alternatives 1 or 3. Hancock Seamounts have been managed under a series of moratoria since 1986, thus managing under a subsequent moratorium should have no additional impact or burden on neither fishery managers nor enforcement.

Under Alternative 2, should a fishery develop at Hancock Seamounts, there would be additional burden on enforcement. However, due to the compensation and subsequent closure of the bottomfish fishery in the NWHI, no fishery is expected to develop in the near future (unless the Hoomalu Zone boundaries can be made consistent with the Papahānaumokuākea MNM boundaries, which may happen over the course of 2010-2011).

4.8 Climate Change

There are no specific studies about the impacts of ocean circulation pattern changes on the armorhead stock. In general, it has been shown that large scale climate cycles can impact winds, currents, ocean mixing, temperature regimes, nutrient recharge, and affect the productivity of all trophic levels in the North Pacific Ocean (Polovina et al. 1994). These impacts can result in

variability in fish stock size, recruitment, growth rates, or other factors. There is no available research specific to the impacts of climate change on pelagic armorhead. The armorhead stock, as well as non-target fishes and protected species that interact with the fishery, are currently affected by these large-scale climate fluctuations and will continue to be affected in the same way, whether or not the fishery is closed.

In the long term, potential changes in oceanic circulation, temperature, or other water quality parameters, or changes in productivity due to climate change could affect armorhead reproduction, growth, or survival because Hancock Seamounts is currently the southernmost extent of armorhead range. Impacts of global climate change on the armorhead stock may be observed through research by PIFSC in conjunction with the NPRFMA, although it may be hard to specifically identify the impacts cause by climate change from those caused by other environmental factors.

4.9 Irreversible and Irretrievable Commitments of Resources

None of the alternatives considered here are likely to result in irretrievable or irreversible commitments of marine resources such as extinction to fish stocks, listed species, or other resources. Even ending the moratorium under Alternative 2 is not likely to result in irretrievable commitments as there is a very low probability of a fishery being initiated at Hancock Seamounts due to the difficulty of entering the fishery. Additionally, due to the overfished status of armorhead, fishers are likely to experience low catch rates, making a fishery for this stock impractical. Federal reporting requirements for non-commercial bottomfishing participants in EEZ waters around Hawaii include reporting all catch and discards as well as any interactions with protected species. Thus under all alternatives, armorhead will continue to be monitored by fishery scientists who routinely collect, analyze and report on the information, whether it's through the Federal reporting requirements for non-commercial participants or through the research of PIFSC and the Participating States of the NPRFMA.

5.0 CONSISTENCY WITH MSA AND OTHER LAWS

5.1 Consistency with the National Standards

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

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

The proposed action is consistent with National Standard 1 as it prohibits fishing armorhead until the stock has been determined to be rebuilt.

With respect to annual catch limits (ACLs), the Council is currently developing a mechanism(s) to meet the new requirements for specifying them, including accountability measures (AMs), and they will be implemented through a separate amendment to the Hawaii Archipelago FEP. For additional information on NMFS' guidance regarding National

Standard 1, please see 74 FR 3178. Thus, ACLs and AMs are not addressed in this amendment under any alternative.

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

The proposed action is consistent with National Standard 2 because it is based on consideration of currently available information on armorhead stock status from four countries, including the U.S. Additionally, the proposed action promotes further scientific research by the participating states of the NPRFMA.

With regards to the rebuilding time, this amendment is consistent with NS2 because the rebuilding time was based on criteria specified in MSA Section 304 and uses the best scientific information available.

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

Pelagic armorhead resources inhabit waters of the SE-NHR Seamounts, which includes Hancock Seamounts. The proposed action is consistent with National Standard 3 because this action would manage the armorhead stock at Hancock Seamounts, the only portion of the species range which is under U.S. jurisdiction. Additionally, the preliminarily proposed action promotes international collaboration and research through supporting NPRFMA measures that promote the conservation and sustainability of armorhead and alfonsin as unit stocks throughout their range of the SE-NHR Seamounts.

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

The proposed action is consistent with National Standard 4 because it prohibits fishing by all U.S. and Territorial residents.

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

The proposed action extends the moratorium on the Hancock Seamounts until armorhead stocks are determined to be rebuilt. Furthermore, the proposed action creates an ecosystem management area, promotes a biological research plan, and specifies a rebuilding time for armorhead stocks, which are all consistent with National Standard 5. The proposed action is consistent with NS5 because the armorhead stock is currently overfished, thus the catch rates

would be low, there has been a moratorium for more than 20 years, and a future fishery at Hancock Seamounts is improbable at this time.

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

The proposed action is consistent with National Standard 6 because it will control fishing mortality through the moratorium on fishing of armorhead and other bottomfish at Hancock Seamounts based on currently available information that states that the armorhead stock is overfished.

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

The proposed action is consistent with National Standard 7 because the measures do not incur costs to the fishery and avoid unnecessary duplication of other fishery regulations because there are no other management measures for Hancock Seamounts.

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

The proposed action is consistent with National Standard 8 because there was never a U.S. fishery at Hancock Seamounts, thus prohibiting future fishing does not affect the fishing communities' participation or economics.

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

The proposed action is consistent with National Standard 9 because it prevents all bycatch associated with a fishery by prohibiting fishing at Hancock Seamounts.

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

The proposed action is consistent with National Standard 10 by not allowing fishing at Hancock Seamounts, thus not affecting human life at sea.

5.2 Consistency with Magnuson-Stevens Act Section 303(a)

Section 303(a) of the Magnuson-Stevens Act requires that any fishery management plan which is prepared by any Council or by the Secretary with respect to any fishery, include the following 15 elements listed below.

1. Description of Conservation and Management Measures
   The proposed action would continue the moratorium on fishing for armorhead, other seamount groundfish, and bottomfish at Hancock Seamounts, create the Hancock Seamounts Ecosystem Management Area, establish a rebuilding time for the armorhead stock, and provide research recommendations for Hancock Seamounts. A description of conservation and management measures, including closed areas and gear restrictions for the armorhead, seamount groundfish, and bottomfish at Hancock Seamounts can be found in Chapter 5 of the Hawaii FEP.

2. Description of the Fishery
   A description of the armorhead fishery can be found in Section **Error! Reference source not found.** of this amendment.

3. Specification of MSY/OY
   The proposed action would not establish any new specification of MSY or OY for any western Pacific fishery. A description of MSY and OY for federally managed stocks can be found in Chapter 4 of the Hawaii FEP.

4. Specification of the Capacity to Harvest OY
   The proposed action would not establish any new specification of the extent to which fishing vessels will harvest OY for any western Pacific fisheries. A description of the capacity for U.S. vessels to harvest OY can be found in Chapter 4 of the Hawaii FEP.

5. Specification of fishery performance information (Annual/SAFE Report Content)
   Chapter 4 of the Hawaii FEP describes pertinent data collected and submitted to the Secretary with respect to the commercial, recreational and charter sectors of the armorhead, other seamount groundfish, and bottomfish of Hancock Seamounts. Chapter 5 of the Hawaii FEP describes the Federal reporting requirement for the seamount groundfish and bottomfish fisheries.

6. Temporary Adjustments to Fishery Access Due to Inclement Weather Conditions
   The proposed action would not establish any new temporary adjustments regarding access to fisheries as a result of weather or ocean conditions. Weather-related adjustments in fishery access are not currently established for any western Pacific fishery management program.

7. Designation of Essential Fish Habitat
   The proposed action would not establish any new EFH designations for any western Pacific fishery. A description of EFH for western Pacific fishery resources can be found in Chapter 6 of the Hawaii FEP.

8. Specification of Scientific Data Necessary for Effective Implementation of the FMP
   Section 2.3.1 of this amendment describes the scientific information needed for effective implementation of the Hancock Seamounts Ecosystem Management Area.

9. Fishery Impact Statement

Section 4.5 of this amendment describes the potential effects of the proposed action on communities and participants of western Pacific fisheries.

10. Specification of Status Determination Criteria
    The proposed action would not establish any new criteria for identifying when a fishery is overfished or approaching an overfished condition. Status determination criteria, including MSY control rules and rebuilding plans can be found in Chapter 4 and 5 of the Hawaii FEP. However, this amendment does establish a rebuilding time for armorhead, pursuant to MSA 304(e)(4), which are described in Section 3.5.1.

11. Bycatch Reporting
    The proposed action would not require any new provision to assess bycatch in the seamount groundfish and bottomfish fisheries. A description of bycatch reporting and bycatch issues for this fishery can be found in Chapter 4 of the Hawaii FEP. Chapter 5 of the Hawaii FEP describes the Federal reporting requirement for the seamount groundfish and bottomfish fisheries.

12. Conservation Measures for Catch and Release Fishery Management Program
    There are no catch and release fishery management programs authorized under any western Pacific FEP.

13. Description of the Fishery Sectors
    A description of commercial, recreational, and charter fishing sectors in the seamount groundfish and bottomfish fisheries can be found in Chapter 4 of the Hawaii FEP; there has never been a U.S. fishery targeting armorhead and other seamount groundfish stocks at Hancock Seamounts..

14. Fair and Equitable Harvest Allocation
    The proposed action would not reduce or allocate the overall harvest in any western Pacific fishery. Allocation of harvest among commercial, recreation or charter sectors is not currently utilized in any western Pacific fishery management program.

15. ACLs and AMs
    The proposed action would not establish any new mechanisms to establish annual catch limits or measures to ensure accountability in the seamount groundfish and bottomfish fisheries. These requirements are being developed by the Council through a separate omnibus amendment to all Council FEPs.

5.3 National Environmental Policy Act

This document has been written and organized to meet the requirements of the National Environmental Policy Act and thus is a consolidated document including an Environmental Assessment, as described in NOAA Administrative Order 216-6, Section 603.a.2. The Environmental Assessment contained in this document uses biological information from, and incorporates by reference, the affected environment described in the Final Supplemental Environmental Impact Statement prepared in association with Amendment 14 to the Bottomfish FMP (WPRFMC 2007) and is summarized in Section 3.0 of this document.

The proposed federal action is to: specify a 35-year rebuilding timeframe for pelagic armorhead and define a no-fishing area named "Hancock Seamounts Ecosystem Management Area (EMA)" that is identified in the Hawaii Archipelagic fishery ecosystem plan as "the portion of the U.S. EEZ in the Northwestern Hawaiian Islands west of 180°W long. and north of 28°N lat." This area is depicted in Figure 1. Within the Hancock Seamounts EMA, a moratorium will be established that prohibits fishing for armorhead and other seamount groundfish and bottomfish until the armorhead stock is determined by NMFS to be rebuilt throughout its range.

The proposed federal action does not include Council research recommendations or potential future management measures identified by the Council and described in Section 2.3.2 – 2.3.4 or the ending of the moratorium. At the time those activities are proposed to be conducted, they will be subject to review for compliance with NEPA and other applicable laws.

This document includes consideration of other alternatives including the no-action alternative and evaluates the potential impacts of these alternatives on the environment.

5.3.1 Purpose and Need
The purpose and need for this action are described in Section 1.2 of this document.

5.3.2 Alternatives Considered
The alternatives considered for this action are described in Section 2 of this document.

5.3.3 Affected Environment
The affected environment for this action is described in Section 3 of this document.

5.3.4 Impacts of the Alternatives
The expected impacts of the alternatives considered for this action are described in Section 4 of this document.

5.3.5 Executive Order 12898
E.O. 12898 requires that a Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions, the District of Columbia, the Commonwealth of Puerto Rico, and the Commonwealth of the Mariana Islands. This amendment is not expected to disproportionately impact human health or the environment because the no domestic fishing has ever occurred at Hancock Seamounts, therefore there are no impacts specifically to minority populations or low income populations

5.4 Executive Order 12866
To meet the requirements of Executive Order 12866 (E.O. 12866), NMFS requires that a Regulatory Impact Review (RIR) be prepared for all regulatory actions that are of public interest. This review provides an overview of the problem, policy objectives, and anticipated impacts of

regulatory actions, and ensures that management alternatives are systematically and comprehensively evaluated such that the public welfare can be enhanced in the most efficient and cost effective way.

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

5.5 Administrative Procedure Act

All federal rulemaking is governed under the provisions of the Administrative Procedure Act (APA) (5 U.S.C. Subchapter II) which establishes a "notice and comment" procedure to enable public participation in the rulemaking process. Under the APA, NMFS is required to publish notification of proposed rules in the Federal Register and to solicit, consider and respond to public comment on those rules before they are finalized. The APA also establishes a 30-day wait period from the time a final rule is published until it becomes effective, with rare exceptions. This amendment complies with the provisions of the APA through the Council's extensive use of public meetings, requests for comments, and consideration of comments. The notice of availability and proposed rule associated with this amendment will also include requests for public comments.

5.6 Coastal Zone Management Act

The Coastal Zone Management Act requires a determination that a recommended management measure has no effect on the land, water uses, or natural resources of the coastal zone or is consistent to the maximum extent practicable with an affected state's enforceable coastal zone management program. On June 21, 2010, a copy of this document and NMFS affirmative consistency determination was provided to coastal zone management program of Hawaii for review. The Hawaii CZM Program concurred with this determination on July 27, 2010.

5.7 Information Quality Act

To the extent feasible, the information pertaining to armorhead stocks, bottomfish and seamount groundfish fisheries contained in this document is current. Much of the information was made available to the public during the deliberative phases of developing the amendment during meetings of the Council. The information was also improved based on the guidance and comments from the Council's advisory groups.

The document was prepared by Council and NMFS staff based on information provided by NMFS Pacific Islands Fisheries Science Center (PIFSC) and NMFS Pacific Islands Regional Office (PIRO). The document will be reviewed by PIRO and NMFS Headquarters staff (including the Office of Sustainable Fisheries). Legal review is expected from NOAA General

Counsel Pacific Islands and General Counsel for Enforcement and Litigation for consistency with applicable laws, including but not limited to the Magnuson-Stevens Act, National Environmental Policy Act, Administrative Procedure Act, Paperwork Reduction Act, Coastal Zone Management Act, Endangered Species Act, Marine Mammal Protection Act, and Executive Orders 13132 and 12866. Additional comments on the document are expected to be received during the comment period the proposed rule.

5.8 Paperwork Reduction Act

The purpose of the Paperwork Reduction Act is to minimize the paperwork burden on the public resulting from the collection of information by or for the Federal government. It is intended to ensure the information collected under the proposed action is needed and is collected in an efficient manner (44 U.S.C. 3501(1)). The proposed action would not establish any new permitting or reporting requirements and, therefore, are not subject to the provisions of the Paperwork Reduction Act.

5.9 Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*) requires government agencies to assess and present the impact of their regulatory actions on small entities including small businesses, small organizations, and small governmental jurisdictions. The purpose of the proposed action is to enhance the recovery of the overfished armorhead stock under the Magnuson-Stevens Act 304(e)(4) by extending the moratorium on fishing at Hancock Seamounts until a stock assessment of the SE-NHR pelagic armorhead stock has been conducted and NMFS determines the stock is to be rebuilt. The proposed action also establishes Hancock Seamounts as an ecosystem management area, promotes a biological research plan for the area, and specifies a rebuilding time for pelagic armorhead. These actions are intended to enhance the likelihood of recovery for the stock.

There has never been a U.S. fishery targeting seamount groundfish stocks on the Hancock Seamounts, nor has there been any interest in starting one. Furthermore, the area has been closed to fishing for the past 24 years. Therefore, the proposed action would not affect and would not have a disproportionate economic impact on any small business entity. For this reason, an Initial Regulatory Flexibility Analysis has not been prepared.

5.10 Endangered Species Act

The Endangered Species Act (ESA) provides for the protection and conservation of threatened and endangered species. Section 7(a)(2) of the ESA requires federal agencies to ensure that any action authorized, funded, or carried out by such agencies is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of the critical habitat of such species.

The proposed action would continue a moratorium on fishing for armorhead and other bottomfish and seamount groundfish at Hancock Seamounts until the armorhead stock is rebuilt, establish a minimum rebuilding time of 35 years for the U.S. portion of the armorhead stock, and classify the portion of the EEZ surrounding the Hancock Seamounts as an ecosystem management area. The intent of the continued moratorium and minimum rebuilding time is to facilitate rebuilding of the armorhead stock, and the intent of the ecosystem management area is

to facilitate research on armorhead and other seamount groundfish. Any research project would need to undergo a review for compliance with other applicable laws, including NEPA and ESA before it may be conducted. Based on this information, the Council believes that the proposed action would not jeopardize any populations or habitats of any species listed as endangered or threatened under the ESA.

5.11 Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA) prohibits, with certain exceptions, the take of marine mammals in the U.S. and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the United States.

There has never been a U.S. fishery targeting seamount groundfish stocks on the Hancock Seamounts, nor has there been any interest in starting one. The proposed action would indefinitely continue a moratorium on fishing for armorhead and other bottomfish and seamount groundfish at Hancock Seamounts until the armorhead stock is rebuilt, establish a minimum rebuilding time of 35 years for the U.S. portion of the armorhead stock, and classify the portion of the EEZ surrounding the Hancock Seamounts as an ecosystem management area. Based on this information, the Council believes that the proposed action would not adversely affect any marine mammal populations or habitats.

6.0 PROPOSED REGULATIONS

§665.202 Management Subareas
(a) (3) Hancock Seamounts Ecosystem Management Area means that portion of the EEZ in the Northwestern Hawaiian Islands west of 180°00' W. long. and north of 28°00' N. lat.

§665.209 Fishing moratorium on Hancock Seamount
Fishing for Hawaii bottomfish and seamount groundfish MUS on the Hancock Seamounts is prohibited until the Regional Administrator determines that the armorhead stock is rebuilt and not overfished.

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