WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL

Information and Management Alternatives Regarding Overfishing in the Hawaii Bottomfish Fishery

February 21, 2006

I. Introduction

The U.S. Congress, through the Magnuson-Stevens Fishery Conservation and Management Act, requires 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" (16 U.S.C. 1851, National Standard 1). If it is determined that overfishing is occurring or a stock is overfished, management actions must be initiated to adjust fishing effort and/or restore or "rebuild" the resource.

The Western Pacific Regional Fishery Management Council (Council) develops and recommends fishery management measures for federal waters (3 to 200 miles offshore) in the Western Pacific Region (American Samoa, Guam, Hawaii, Northern Mariana Islands and the Pacific Remote Island Areas[1]). The Council's Bottomfish Plan Team, which includes representatives from the National Marine Fisheries Service (NMFS) and the State of Hawaii's Division of Aquatic Resources (HDAR), annually reviews the status of bottomfish resources in Hawaii.

In 2003, the method by which fishery scientists determine the status of fishery stocks has recently changed from evaluating Spawning Potential Ratios (SPR) to the following two key criteria:

1) Overfishing: This is related to the amount of fishing mortality (the total number/pounds of fish that are caught) that a stock can support on an ongoing basis.

2) Overfished: This is related to the stock biomass (the total amount of bottomfish in the water) necessary to support a sustainable harvest.

Using the new assessment criteria on 2003 fisheries data, NMFS found that the Hawaii bottomfish resource as a whole (archipelago-wide) is not overfished. However, it has been determined that "overfishing" is occurring due to excessive fishing effort in the main Hawaiian Islands (MHI).

[1] Howland, Baker, Jarvis, Wake and Palmyra Islands, Johnston Atoll and Kingman Reef.

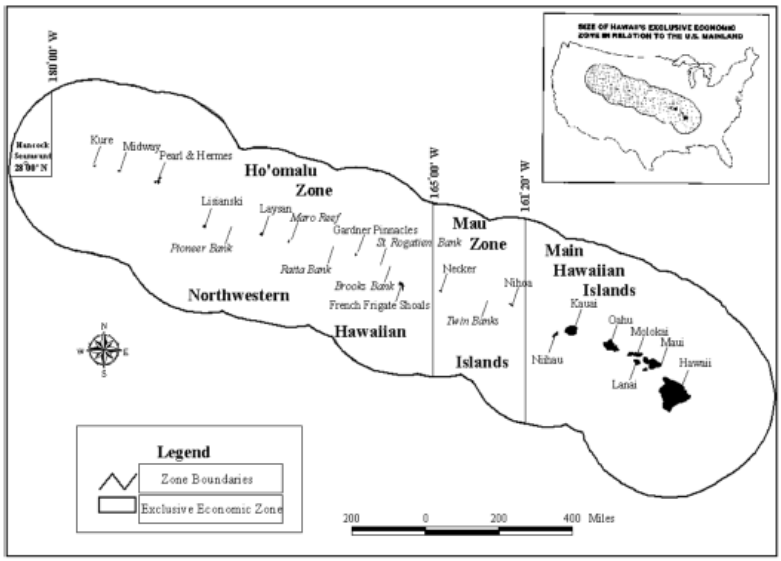
On May 27, 2005, the Secretary of Commerce notified the Council of this overfishing determination and gave the Council until May 2006 to develop a plan to reduce fishing mortality for bottomfish in the MHI. Scientists at NMFS' Pacific Islands Fishery Science Center (PIFSC) report that the target level of effort reduction, based on 2003 fishery statistics, is 15 percent.

This document provides information for fishermen, fishing support industries, fishery organizations and interested members of the public. Public meetings to review alternatives under consideration by the Council and to solicit public input are scheduled to be held throughout Hawaii during March 2-14, 2006. The Council is anticipated to take final action on this issue at its 131st on March 13-16, 2006.

II. Hawaii Bottomfish Fishery Zones and Management Overview

The Hawaii Archipelago is made up of 132 islands and atolls stretching 1,800 miles. The Archipelago is divided into the MHI, which includes the eight major inhabited islands from Hawaii at the southeast end of the archipelago up through Kauai and Niihau, and the Northwestern Hawaiian Islands (NWHI), which encompasses the largely unpopulated islands, atolls and reefs that stretch northwest of Niihau to Kure Atoll.

Figure 1: Hawaii bottomfish management zones



In coordination with the State of Hawaii, the Council manages Hawaii's offshore bottomfish resources through its Bottomfish and Seamount Groundfish Fishery Management Plan (FMP). The FMP was established in 1986 and, among other things, prohibits the use of destructive fishing gear, such as bottom trawls, explosives and poisons. The Council's Amendments 2 and 5, subsequently created and limited entry to the Hoomalu Zone in 1988 and the Mau Zone in 1998 respectively. Management of bottomfish in Hawaii Archipelago is thus divided into three management zones - the MHI, the Hoomalu Zone and Mau Zone (Figure 1).

Bottomfish Management Unit Species (BMUS) managed under the FMP include deep-slope dwelling snappers, groupers, and jacks that are harvested using the hook-and-line method of fishing where weighted and baited lines are lowered and raised with electric, hydraulic, or hand-powered reels. These species are found generally at depths of 50 to 150 fathoms. Also included are Hawaii's onaga (red snapper) and opakapaka (pink snapper) that are well-known in local restaurants, as well as the hapuupuu or Hawaiian grouper. The BMUS also include species that

are not found in Hawaii but are caught in other parts of the Western Pacific Region such as American Samoa and the Mariana Archipelago (Table 1).

Table 1: List of Hawaiian Bottomfish Management Unit Species

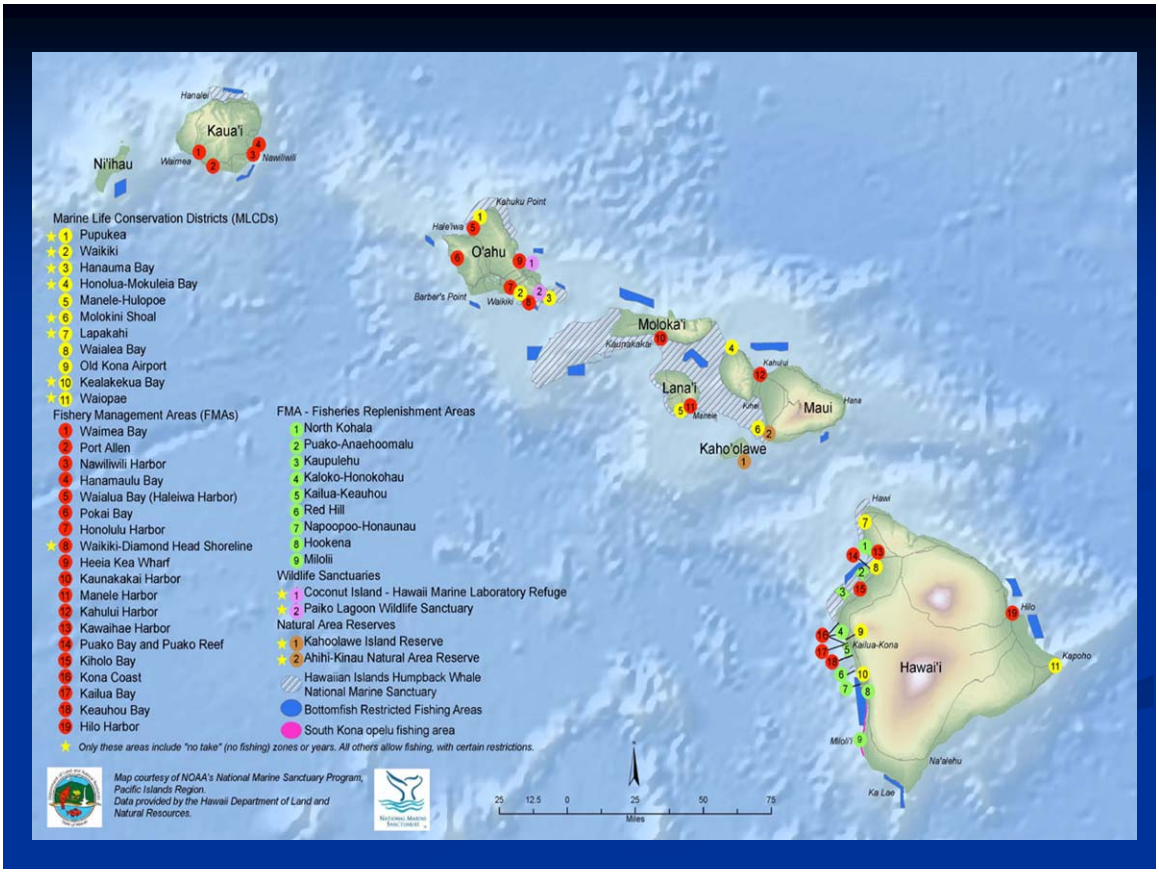
Common name	Scientific name
Uku	*Aprion virescens*
Hapuupuu	*Epinephelus quernus*
Opakapaka	*Pristipomoides filamentosus*
Yellowtail kalekale	*P. auricillia*
Yellowtail Opakapaka	*P. flavipinnis*
Kalekale	*P. seiboldi*
Gindai	*P. zonatus*
Onaga	*Etelis coruscans*
Ehu	*E. carbunculus*
Butaguchi	*Pseudocaranx dentex*
Lehi	*Aphareus rutilans*
White ulua	*Caranx ignobilis*
Black ulua	*C. lugubris*
Kahala	*Seriola dumerili*
Taape	*Lutjanus kasmira*
Kinmedai/Alfonsin	*Beryx splendens*
Medai/Butterfish/Ratfish	*Hyperoglyphe japonica*
Kusakari tsubodai/Armorhead	*Pseudopentaceros wheeleri*

In 1998, HDAR created 19 Restricted Fishing Areas (RFAs) throughout the MHI primarily to help rebuild stocks of onaga and ehu, which were considered to be locally depleted (experiencing low abundance). These RFAs are centered on the 100-fathom contour and close about 20 percent of the bottomfish habitat in the MHI (Figure 2). The list of prohibited species in the RFAs was later expanded to include other deep-slope bottomfish commonly caught while targeting onaga and ehu, specifically gindai, kalekale, hapuupuu, lehi and opakapaka. The reason for prohibiting the targeting or possession of the additional species was that onaga and ehu were often incidentally caught but could not be released alive due to the high mortality rates from bringing the fish to the surface (i.e. embolism).

The State also instituted recreational bag limits for onaga and ehu. The rule limits non-commercial fishermen (those without a valid Commercial Marine License, or CML, issued by HDAR) to a maximum of five onaga or ehu combined, per person per trip.

Vessel owners (recreational and commercial) must also register their vessels with HDAR and mark their vessels with a bottomfishing identification number. It is unlawful for any person to take or possess bottomfish species in the MHI on an unregistered vessel. As of August 2005, a total of 3,700 people have registered their vessels for bottomfishing. About 60 percent are registered as commercial fishing vessels with the rest registered as recreational vessels. The lengths of registered vessels range from 8 to 65 feet, with an average at about 19 feet. The vessel registration program does not require registration renewals or reporting of fishing activity or landings by recreational fishermen. The effectiveness of HDAR's management regime is currently under review.

Figure 2: Bottomfish Restricted Fishing Areas



III. Commercial and Recreational Monitoring

There are few fishermen in Hawaii who specialize in harvesting bottomfish. Most fishermen shift from fishery to fishery in response to weather conditions, seasonal abundance or fluctuations in prices. In addition, most vessel operators are part-time commercial fishermen and may combine commercial, recreational or subsistence effort in a single fishing trip.

The most reliable data for Hawaii's recreational bottomfish fishermen come from a creel survey conducted on Oahu by NMFS in 1990–1991, which found that 66 percent of the bottomfish landed were not sold and thus could be considered recreational catch. To date the Hawaii Marine Recreational Fishing Survey (HMRFS) program, re-initiated in 2001, has not provided comprehensive information on the bottomfish fishery because of the low number of bottomfish fishermen intercepted by surveyors.

In Hawaii, MHI fishermen who hold a CML are required to complete a monthly HDAR catch report. The form requires fishermen to report the type of fishing gear used (e.g., deep-sea handline, trolling, etc.), the area fished and the number of each species of fish caught. Similarly, commercial fishermen participating in the NWHI bottomfish fishery are required to complete a HDAR NWHI catch report. This daily log collects information on the type of gear used, the number of lines and hooks, the number of each species of fish caught, etc.

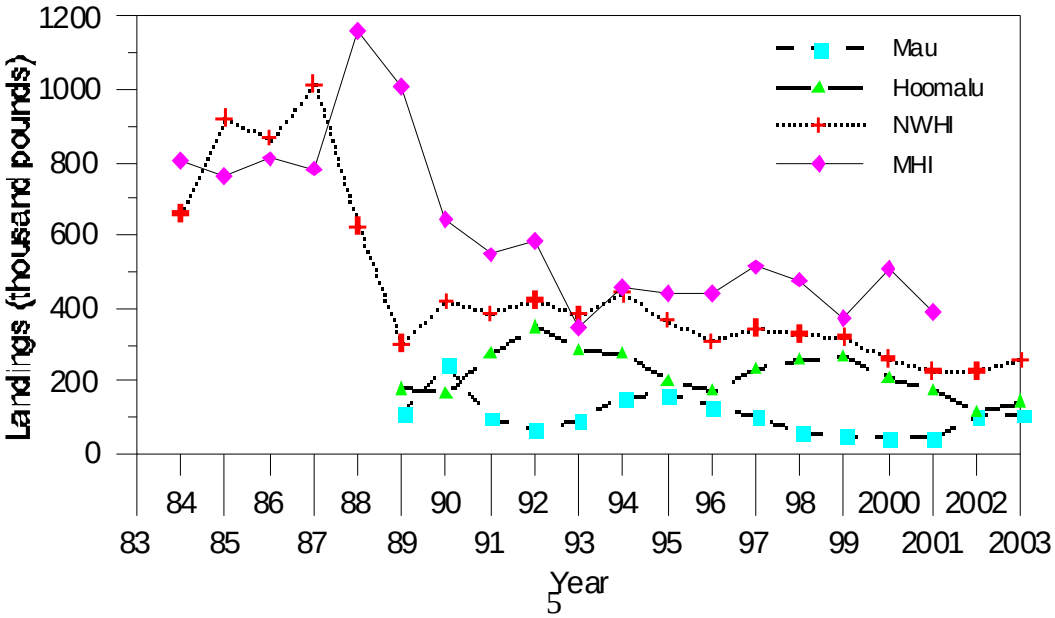
Additional commercial landing information on both the MHI and NWHI bottomfish fisheries is collected through HDAR's Dealer Reporting program.

Data on Hawaii's commercial bottomfish fisheries depends on honest reporting of catch and effort, and little to no data is collected from recreational fishermen. Good enforcement and accurate reporting of catch data are imperative for the bottomfish fishery in the MHI to be managed sustainably.

IV. Commercial Fishery Trends and Status of Hawaii Bottomfish Resources

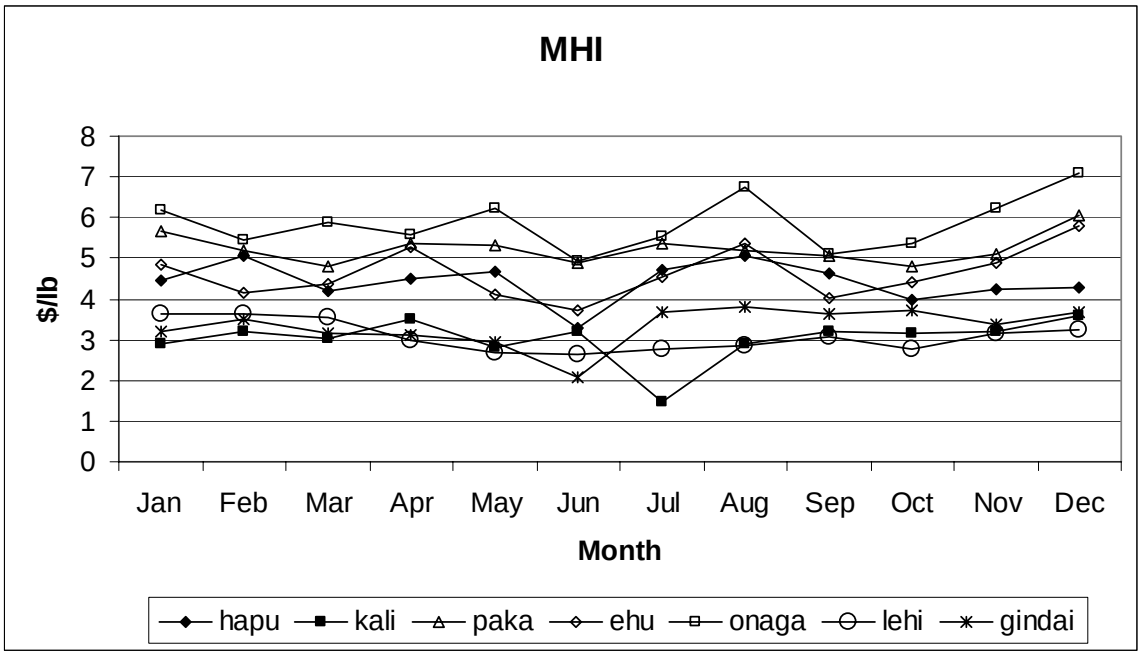
Since the establishment of the NWHI limited entry programs (Hoomalu Zone 1988 & Mau Zone 1998), participation and landings have stabilized (Figure 3). In 2002, nine vessels participated in the NWHI bottomfish fishery landing 108,000 and 120,000 pounds of bottomfish species from the Mau and Hoomalu Zones, respectively. An additional 384 vessels reported commercial landings of 361,774 pounds of bottomfish in the open access MHI fishery during 2002.

Figure 3: Hawaii commercial bottomfish landings 1983-2003



The average price data by species by month for the MHI fluctuates, with a trend to higher prices in the winter months, when bottomfish is in demand for seasonal celebrations. (Figure 4).

Figure 4: Average Prices by Species by Month for the MHI



Reported data from the MHI commercial bottomfish fishery show that catch per unit effort (CPUE or catch per trip) has remained relatively stable over the past decade, while fishing effort and participation has declined by 50 percent since 1998 (Figure 5).

Fishery participation and trips in the MHI declined from record high levels in the 1980s through the early 1990s. Effort increased through the late 1990s, but has continued to decline from 1998 to 2003 (Figure 6).

In the Mau Zone, participation declined from 14 vessels in 1990 to 5 vessels in 2003. CPUE has been relatively stable over the past decade but has increased in recent years as participation has dropped. In the Hoomalu Zone, participation has been fairly constant, while effort has fluctuated and shows no discernible trend; CPUE has declined over time (Table 2), which is consistent with sustainable fisheries population dynamics models.

The NMFS Pacific Islands Fisheries Science Center has not completed a comprehensive stock assessment for Hawaii's bottomfish resources; however, one is targeted for completion by the end of 2006.

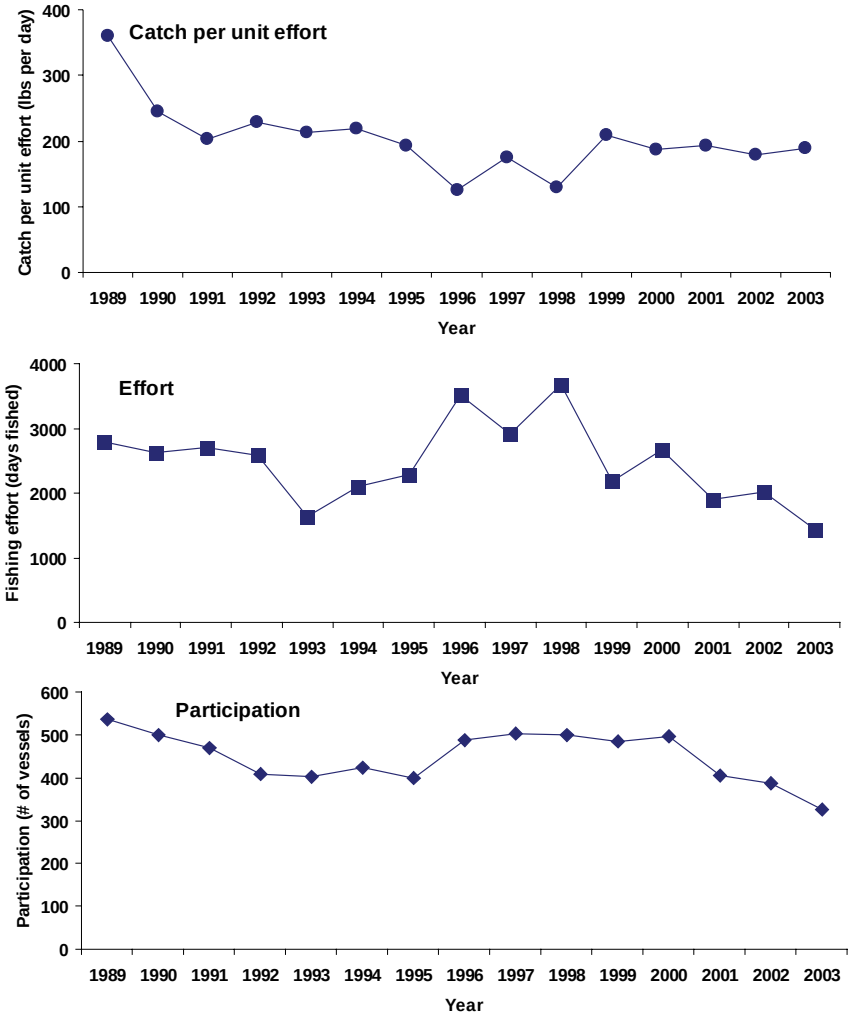


Figure 5: MHI Catch per unit effort, days fished and number of commercial bottomfish vessels 1989-2003

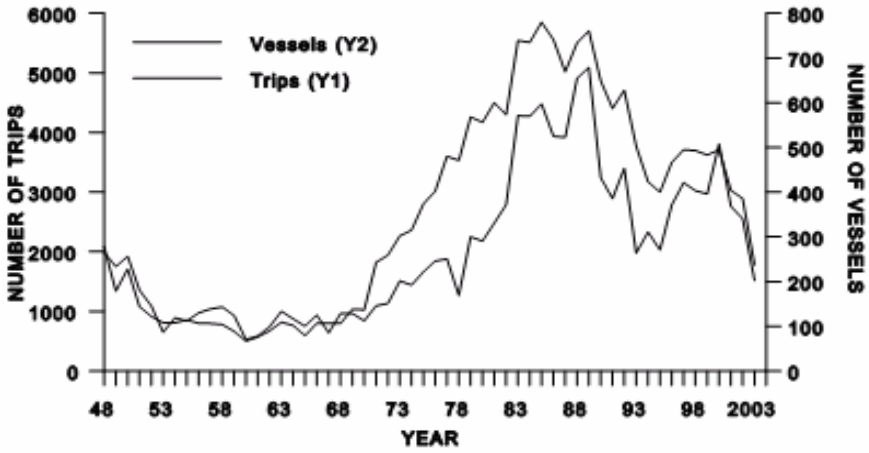


Figure 6: MHI Commercial Bottomfish Reported Effort and Participation 1948-2003

Table 2: Summary of bottomfish landings, catch per unit effort and vessel participation (1995-2003)

Year	MHI Landing (lbs)	Mau Landing (lbs)	Hoomalu Landing (lbs)	MHI CPUE (lb/trip)	Mau CPUE (lb/trip)	Hoomalu CPUE (lb/trip)	MHI Vessels	Mau Vessels	Hoomalu Vessels
1995	439,625	166,000	202,000	193	1,635	6,130	400	10	5
1996	439,867	135,000	176,000	125	1,543	6,216	487	13	3
1997	512,554	105,000	241,000	176	1,976	6,351	502	9	6
1998	478,802	66,000	266,000	130	1,689	5,315	498	7	7
1999	455,131	54,000	269,000	209	1,808	5,611	483	7	6
2000	496,989	49,000	213,000	187	1,053	5,909	495	6	5
2001	366,997	50,000	236,000	194	916	5,757	404	6	5
2002	361,774	108,000	120,000	179	1,416	4,638	386	5	4
*2003	272,569	77,000	145,000	190	2,070	3,713	325	5	4

* preliminary NMFS data

Table 3: Summary of fishery characteristics, participation and management measures

	Main Hawaiian Islands	NWHI Mau Zone	NWHI Hoomalu Zone
Location	Big Island to Niihau	Nihoa and Necker Islands	French Frigate Shoals to Kure Atoll
Management authority	HDAR; Hawaii Administrative Rules	Bottomfish FMP; Federal regulations	Bottomfish FMP; Federal regulations
Location of habitat	80% of MHI fishing grounds are inside State waters	Nearly 100% of habitat is in federal waters	Nearly 100% of habitat is in federal waters
Primary species Managed	7 deepwater species (onaga, ehu, opakapaka, gindai, kalekale, hapuupuu, lehi)	17 deepwater snappers, groupers and jacks (includes State's 7)	17 deepwater snappers, groupers and jacks (includes State's 7)
Effort controls	Unlimited entry; about 3,700 vessels registered with HDAR to fish MHI. 19 Bottomfish RFAs in place	Limited entry since 1999, up to 10 permits allowed (2 permits reserved for indigenous communities)	Limited entry since 1989 with up to 7 permits allowed
Capacity controls	No vessel size limits	60-foot vessel size limit	60-foot vessel size limit
Vessel participation	325 commercial vessels reported landings in 2003; Recreational participation unknown	5 commercial vessels active in 2003 and 2004; No recreational participation	4 commercial vessels active in 2003 and 2004; No recreational participation
Average trip duration	Mostly day trips, but may extend for several days	Trips last up to 2 weeks	Trips last up to 3 weeks
Seasonality of fishery	Highest average landings in winter months around holiday season	Consistent landings throughout year, peaks in summer months	Consistent landings throughout the years, peaks in summer and winter holiday season
Peak commer-cial landings & value	Peak landings occurred in 1988, at 1,166,000 pounds ($3,288,000)	Peak landings occurred in 1990 at 249,000 pounds ($630,000)	Peak landings occurred in 1992 at 353,000 pounds ($1,030,760)
Recreational fishing controls	5 onaga and ehu combined per person per day	No recreational fishing allowed without federal limited entry permit	No recreational fishing allowed without federal limited entry permit
Permit, license and reporting	Bottomfish vessel registration for all vessels. Commercial operators must have CML & make monthly catch reports	CML, federal permits and daily landing reports required	CML, federal permits and daily landing reports required
Observers	None	Yes, federal observers	Yes, federal observers

V. Alternatives to Address Overfishing in the MHI

All the actions below refer to the State's seven bottomfish management unit species (onaga, ehu, opakapaka, gindai, kalekale, hapuupuu, and lehi). These species are the focus of this action because a) this facilitates synchronization HDAR's management measures; b) the federal BMUS list includes some species such as taape, which is an introduced species not subject to overfishing; and c) some federal BMUS species are caught in shallow areas on non-bottomfish gear and their populations are not subject to overfishing (e.g., uku and kahala).

The key to success under all of the following options will be reliable monitoring, good data reporting and effective enforcement.

ALTERNATIVE 1: NO ACTION

Alternative 1, the no action alternative that is required under NEPA, would continue the present management regime under the Bottomfish FMP. If the Council chooses to take no action, NMFS would likely take action on behalf of the Secretary of Commerce to end the overfishing, however, the action would be taken without the benefit of the Council's expertise, advisory groups and well-known public process.

Current management of the bottomfish fishery in the MHI is limited to federal prohibitions on certain types of gear and state limits on recreational harvest of onaga and ehu; that is, anyone intending to harvest the bottomfish species of the Deep 7 species concern (onaga, ehu, gindai, kalekale, hapuupuu, opakapaka, and lehi) is required to register with the state and place the letters "BF" on their vessel and comply with the State's 19 designated restricted fishing areas (RFAs) that have been closed to bottomfishing since 1998.

The State of Hawaii Division of Aquatic Resources is currently assessing its bottomfish management regime and evaluating the effectiveness of its RFAs. This alternative would maintain the current state management regime of bottomfish vessel registration, recreational catch limits (onaga and ehu), commercial fishing reporting, and the 19 RFA. This alternative would also include any changes to the state's management regime, which to date may include, reducing the number of RFAs, modifying the locations, standardizing the boundaries to corresponding minutes of latitude and longitude, and increase their size. Factors being considered for modifying RFAs include facilitating navigation by GPS for fishermen to maintain station outside RFAs, locating closures nearshore and/or nearshore line features to facilitate monitoring and enforcement, increasing habitat protection, facilitating larval transport and recruitment between banks and islands, and modifying commercial fisheries statistical area grids to allow for better evaluation of the closures effectiveness.

ALTERNATIVE 2: AREA CLOSURES

Under Alternative 2a, all recreational and commercial fishermen would be prohibited from targeting, landing or selling any of the seven deep-slope bottomfish species from Penguin Bank (Figure 7) and Middle Bank (Figure 8). All vessel operators (both commercial and recreational) targeting bottomfish in the MHI would be required to register their vessels on an annual basis and would be required to complete and submit catch reports detailing their catches, fishing effort, and area fished. To facilitate recognition of bottomfish registered vessels from the air, each vessel would be required to be marked on an unobstructed upper surface with its registration number.

This is the only alternative that would be solely a federal action, as both Penguin and Middle Banks occur entirely in federal waters. Based on 1998 to 2004 and 1990 to 2004 data, respectively these areas represent an average of 15 percent and 18 percent of MHI bottomfish landings (Figure 9).

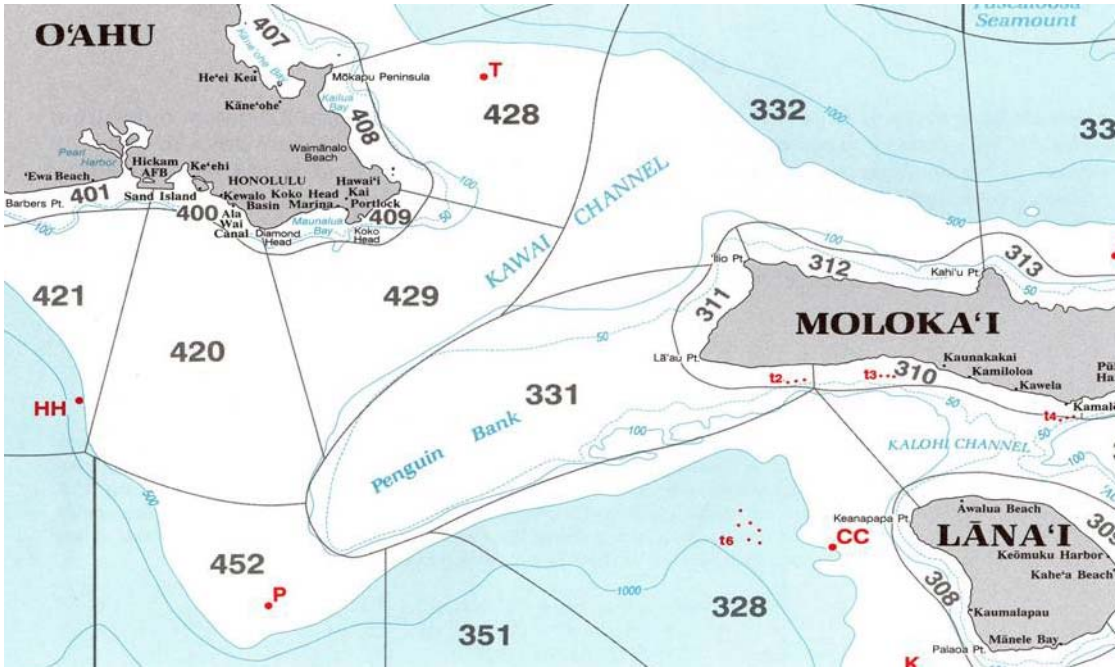


Figure 7: Penguin Bank

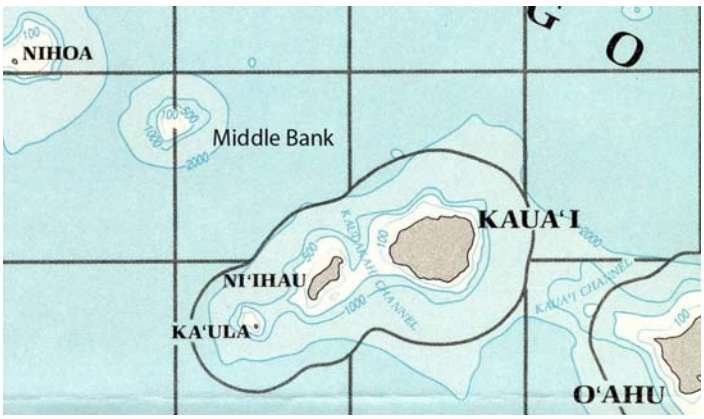
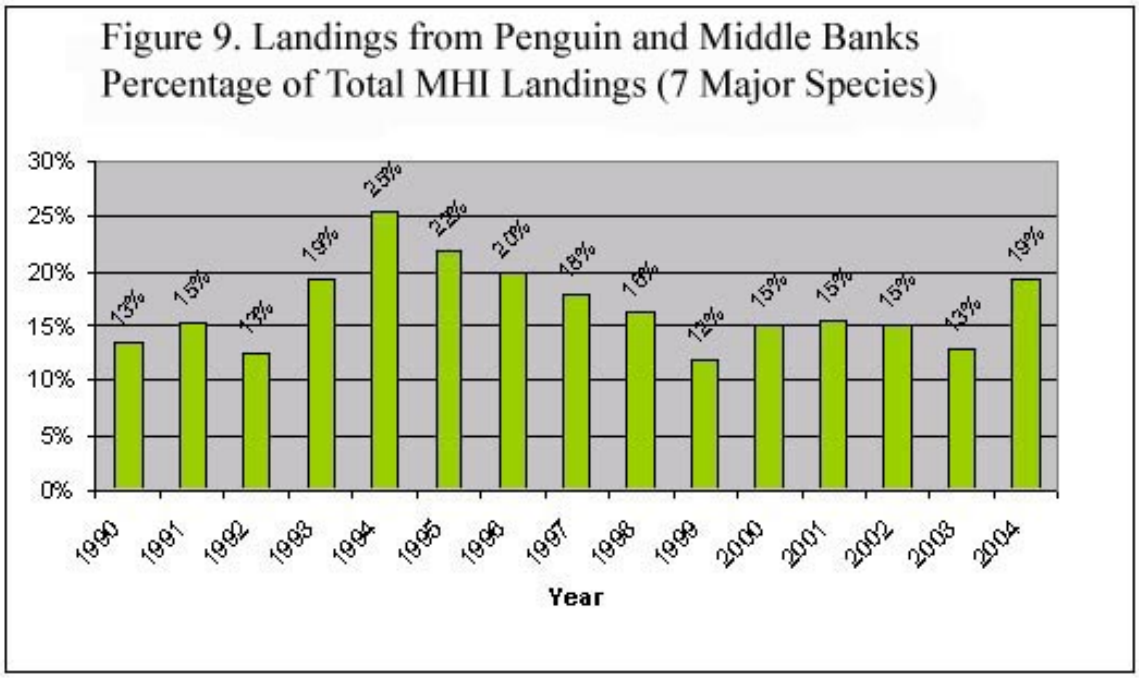


Figure 8: Middle Bank



This action will include at-sea enforcement as shore-based determination of the origin of bottomfish landed or sold in Hawaii would be impossible. Two factors enhance at-sea enforcement capability for Penguin Bank—it is a single large bottomfish area that is close to Oahu which is the base of U.S. Coast Guard operations in the region. Middle Bank is also amenable to occasional monitoring by the U.S. Coast Guard through aerial surveillance.

Under this alternative, bottomfish within the closed area would be protected, but fishing effort would likely be displaced to other areas where local bottomfish populations would be exposed to greater fishing pressure as a consequence of the closure. A transfer of effort to less productive areas would likely lead to a lowering of CPUE and the possibility of increased localized overfishing.

Closing Penguin Bank, the most productive bottomfish area in the MHI, and Middle Bank, would also disproportionably impact commercial and recreational bottomfish fishermen as well as markets based in Oahu and Kauai. Penguin Bank produces high-quality sashimi-grade onaga for oahu based markets. Some full-time commercial operations might no longer be viable and the opportunities to develop bottomfish charter fishing would be constrained for businesses based on Oahu and Kauai.

Alternative 2b: Overlay Federal Closures on Proposed HDAR Restricted Fishing Areas

Alternative 2b would overlay federal closures on the State of Hawaii's proposed Bottomfish Restricted Fishing Areas (BRFAs) in federal waters (3-200 m; see Figures 2-4). According to HDAR, the state's current BRFAs were delineated according to bottom topography, location of reported bottomfish landings, proximity to access points and points of observability for ease of enforcement, and recommendations from fishermen, with the primary purpose being to protect critical bottomfish habitat and presumed spawning and nursery habitat areas.

The state has undertaken a review of their management program. Although the review is not yet complete, HDAR has publicly proposed to modify its network of BFRAs statewide. They propose to establish 15 BRFAs, larger than the current BRFAs, that are based on comprehensive bottom mapping and sonar data that provide a detailed view of bottomfish Essential Fish Habitat in the 100-

400 m depth range. According to HDAR, the proposed BRFAs will reduce fishing effort by 15.4% and mortality (landings) by 15.3% based on 2004 data.

According to HDAR, the state intends to develop and implement monitoring methodology that will allow them to determine how fishing mortality, biomass and size distribution of bottomfish are affected by the BRFAs. This monitoring will include both fishery-dependent and fishery-independent components.

Under this alternative, all vessel operators (both commercial and recreational) targeting bottomfish in the MHI would be required to register their vessels on an annual basis and would be required to complete and submit catch reports detailing their catches, fishing effort, and area fished. To facilitate recognition of bottomfish registered vessels from the air, each vessel would be required to be marked on an unobstructed upper surface with its registration number.

According to HDAR, new technology will allow the state to monitor a grid of stations within appropriate bottomfish habitats throughout the main Hawaiian Islands, using baited and unbaited video cameras to directly assess species and size-distribution at selected. HDAR has stated that it is committed to conduct this work in collaboration with the University of Hawaii and the Pacific Islands Fisheries Science Center. According to HDAR, some catch sampling will be needed within closed areas and consideration is being given to developing a monitoring effort that will incorporate cooperating fishermen as a component of a limited sampling program to check periodically changes in size distribution and CPUE within the BRFAs.

In order for area closures to be effective, it is important to have effective enforcement. According to HDAR, problems with the current level of enforcement have been noted and were an incentive to place the proposed BRFAs closer to shore, to the extent possible, and design them with straight-line boundaries, making it easier for both fishermen and enforcement officers to determine whether fishing takes place inside or outside the closed areas. HDAR has stated that they will also develop an education program (appropriate signage, brochures, publicity, etc.) to make sure fishermen are aware of the revised BRFAs and facilitate reporting of violations.

According to HDAR, the DLNR's Division of Aquatic Resources and Division of Conservation and Resources Enforcement will work closely with appropriate federal enforcement agencies (U.S. Coast Guard and National Marine Fisheries Service) to ensure adequate enforcement of the proposed closed areas.

Figure 10: Existing and Proposed BFRAs around Kauai, Niihau, and Kaula Rock

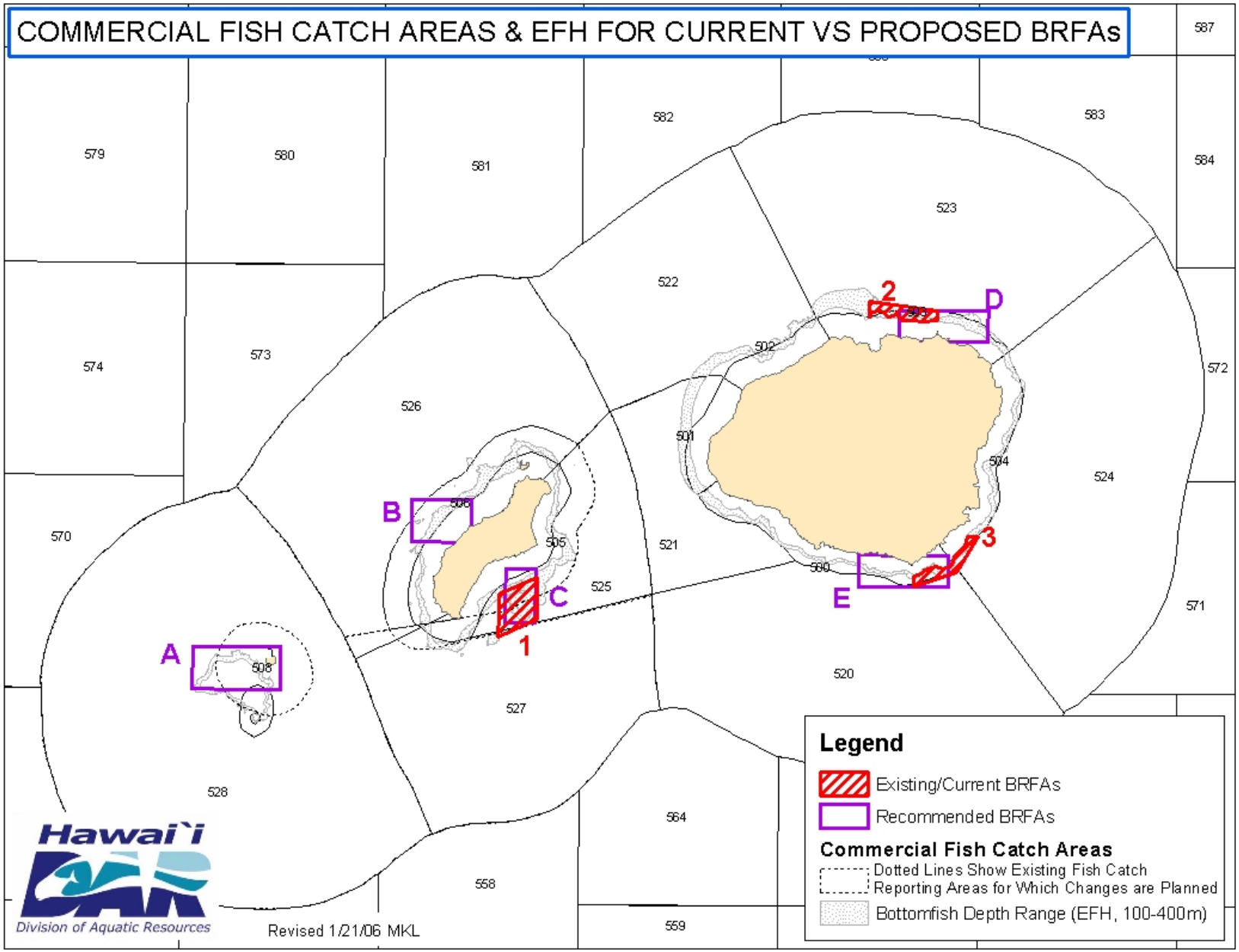


Figure 11: Existing and Proposed BRFAs around Oahu, Penguin Bank, Molokai, and Maui

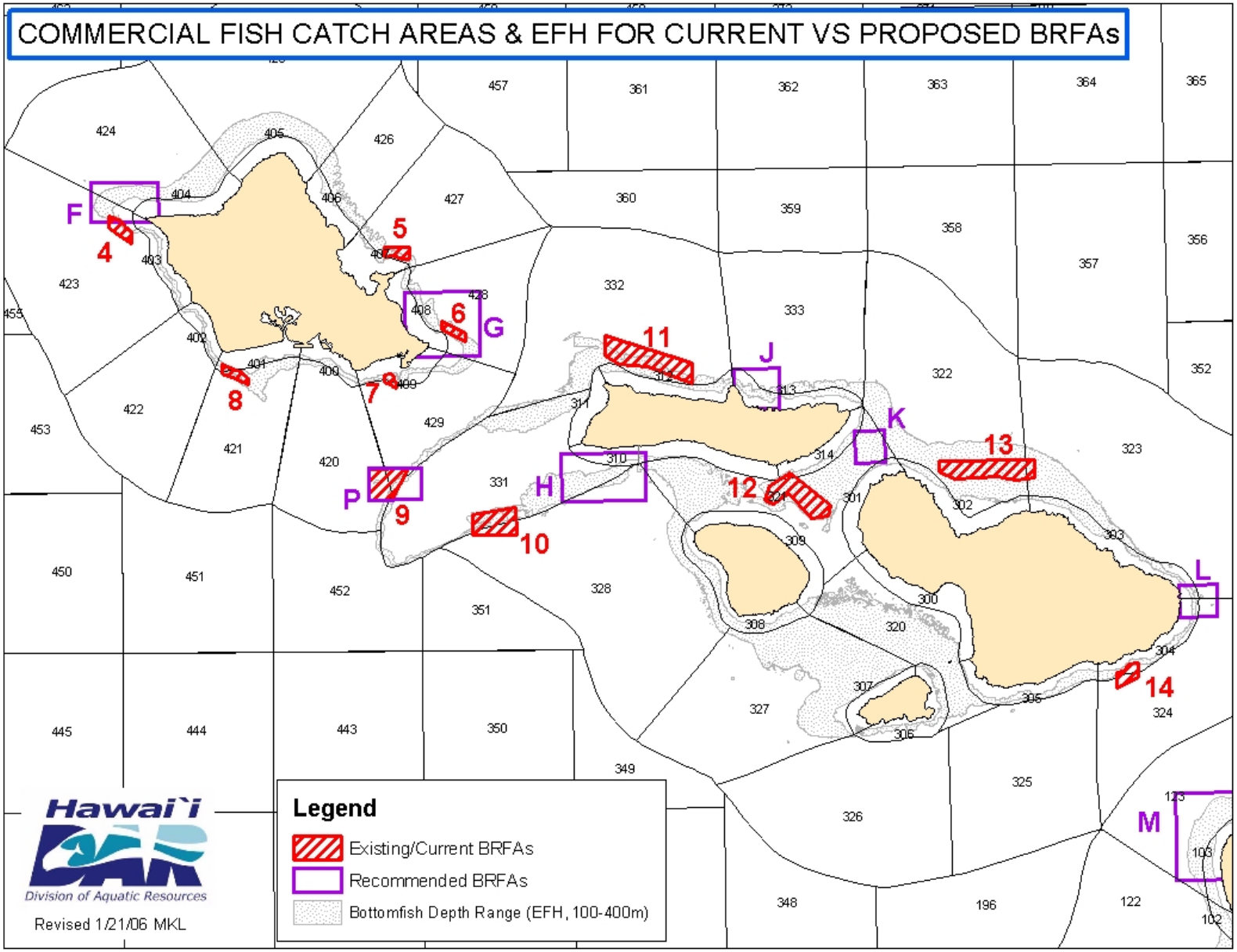
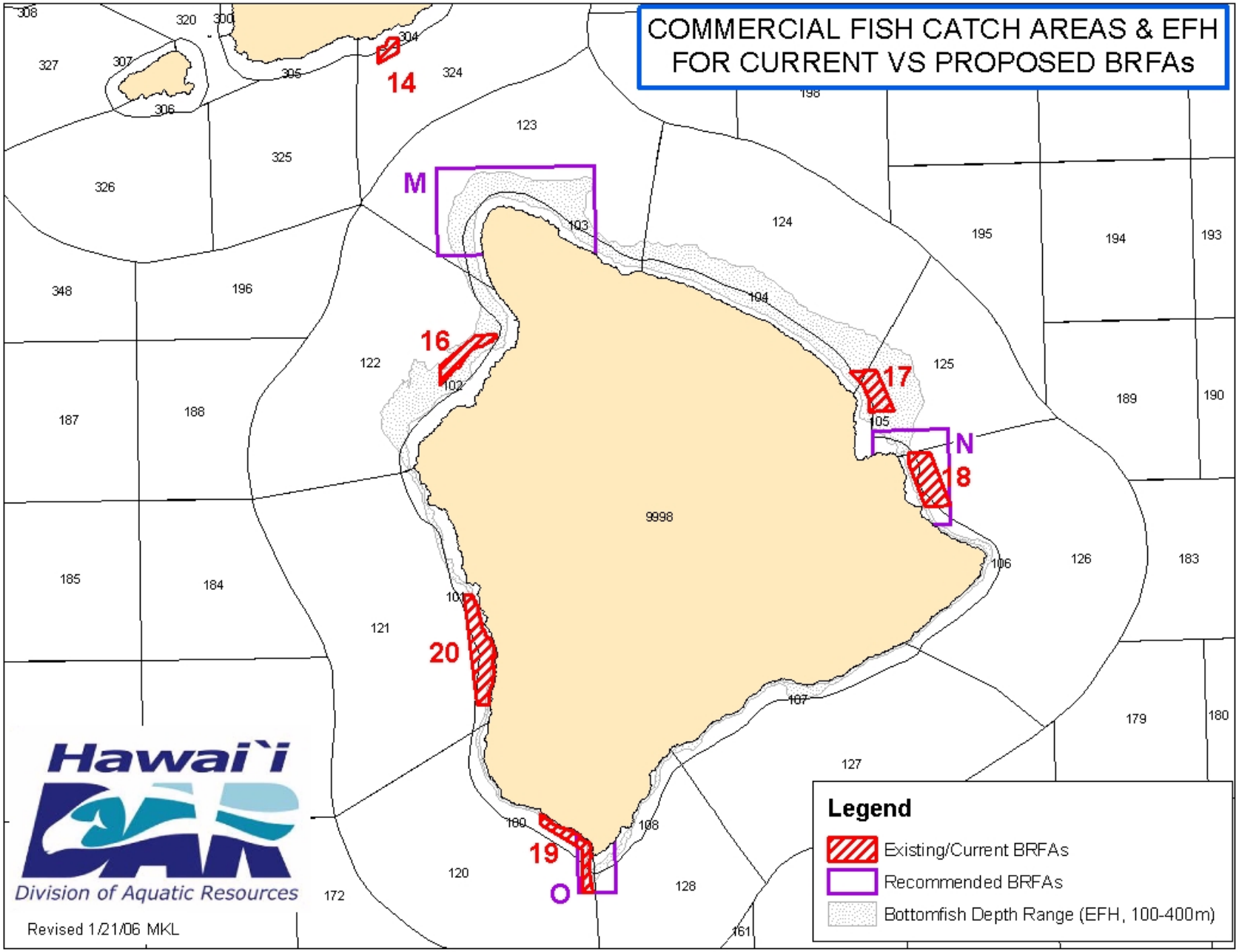


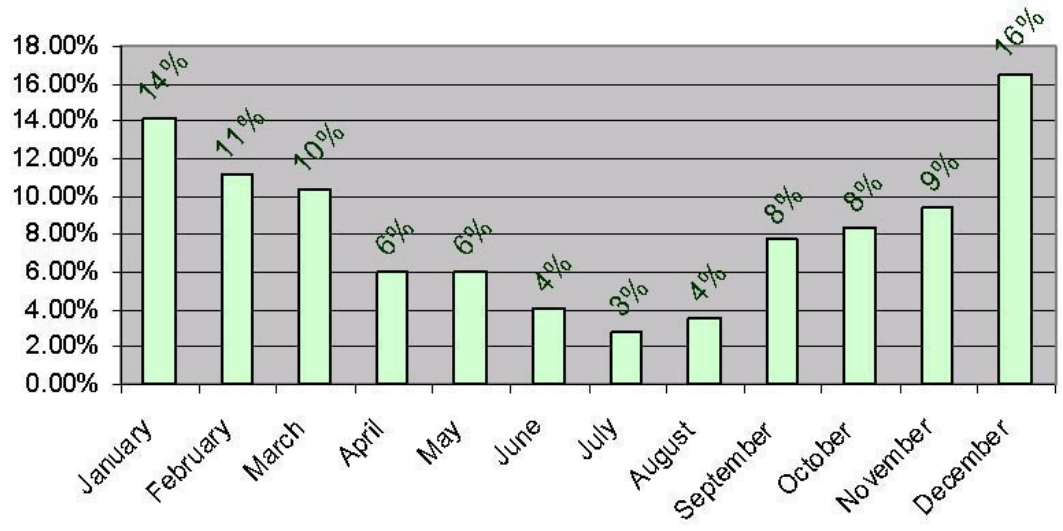
Figure 12: Existing and Proposed BRFAs around Hawaii Island



ALTERNATIVE 3: SEASONAL CLOSURE

Under this alternative, a summer closure would be implemented from May 1 to August 31 of each year for the entire MHI bottomfish fishery (both commercial and recreational vessels). Based on past landings (Figure 10) the timing of the closure would be designed to achieve at least a 15 percent reduction in fishing mortality. Targeting, landing and or selling the seven deep-slope bottomfish species would be prohibited during the closed season; however, the federally permitted and healthy NWHI bottomfish fishery would remain open. All vessel operators (both commercial and recreational) targeting bottomfish in the MHI would be required to register their vessels on an annual basis and would be required to complete and submit catch reports detailing their catches, fishing effort, and area fished.

Figure 12: Percent MHI Landings by month for 7 major bottomfish species



Enforcement of this alternative would consist of shore-based monitoring of landings and sales. Only bottomfish from the NWHI or imported bottomfish could be legally sold during the closed season and these would need to be certified and tracked to final point of sale. At-sea enforcement would not be required, but occasional checks would supplement shore-side monitoring. To facilitate recognition of bottomfish registered vessels from the air, each vessel would be required to be marked on an unobstructed upper surface with its registration number.

Successful implementation and enforcement of this alternative would be dependent upon coordination with the State of Hawaii as it would require closure of both state and federal waters.

Under this alternative, impacts would be evenly distributed throughout the MHI and the fishery would remain open during the winter holiday season. Local markets would continue to be supplied with NWHI fish but there would be reduced availability of locally caught bottomfish during the closed season. That shortfall in market supply would likely be made up with imported fish and prices could increase for locally caught fish during the closed season. In addition, depending upon

import arrangements there may be some loss of market for the MHI fishermen if wholesalers come to rely on imported fish and choose not to switch back to locally caught fish during the open season.

Between 130 and 200 commercial vessels harvest MHI bottomfish during the summer months, of which less than 10 percent have consistently high catches during this period. These fishermen could be heavily impacted under this alternative. Significant transfers of effort from the MHI to the NWHI would be unlikely, as the NWHI fishery is a limited entry fishery that allows no more than 17 vessels under current fishery regulations.

Although bottomfish spawn year round, evidence indicates that spawning is greatest in summer months, so a summer closure would provide additional benefits by reducing fishing mortality of spawning bottomfish. However there would be reduced opportunities to develop bottomfish charter fishing and there may be safety implications for fishermen who try to make up bottomfish fishing time in the open winter season, when the weather is more inclement.

ALTERNATIVE 4: CATCH LIMITS

Alternative 4 includes two variations. Both would limit the commercial catch of MHI bottomfish. Alternative 4a would establish a fleet-wide total allowable catch (TAC) of bottomfish for all commercial fishing vessels in the MHI, while Alternative 4b would establish vessel specific individual fishing quotas (IFQs) for bottomfish for all commercial fishing vessels in the MHI. Recreational fishing vessels would continue to be subject to the bag limits already established by HDAR (five onaga and ehu combined per person per trip).

Under both variations, all vessel operators (both commercial and recreational) targeting bottomfish in the MHI would be required to register their vessels on an annual basis and would be required to complete and submit end of trip reports detailing their catches, fishing effort, and area fished.

Enforcement of this alternative would consist of shore-based monitoring of landings and sales. Imported bottomfish or bottomfish caught in the NWHI would still be available, and these would need to be certified and tracked to final point of sale. At-sea enforcement would not be required, but occasional checks would supplement shore-side monitoring when the TAC of IFQs were reached. To facilitate recognition of bottomfish registered vessels from the air, each vessel would be required to be marked on an unobstructed upper surface with its registration number.

Both variations would offer direct control of fishing mortality, but there would likely be high-grading (discards of less desirable fish so that quotas could be filled with higher valued fish) with an associated high risk of fish mortality among the discards due to embolism. Unreported discards would lead to incomplete information regarding total fishing mortality by species and size.

<u>Alternative 4a: Total Allowable Catch Limit</u>

Under Alternative 4a, a TAC of 194,484 pounds of the Deep 7 species (all species combined), representing a 15 percent reduction from the 2003 fleet-wide MHI commercial bottomfish catches of these species, would be applied to the entire MHI commercial bottomfish fishery. The bottomfish fishing year would start on October 1 and continue until the TAC was reached. Thereafter, no fishing for bottomfish (commercial or recreational) would be permitted in the MHI. The NWHI bottomfish fishery would remain open.

Successful implementation and enforcement of this alternative would be dependent upon coordination with the State of Hawaii as it would require closure of both state and federal waters.

Enforcement of this alternative could consist of shore-based monitoring of landings and sales. Imported bottomfish or bottomfish caught in the NWHI would still be available, and these would need to be certified and tracked to final point of sale. At-sea enforcement would not be required, but occasional checks would supplement shore-side monitoring.

Alternative 4b: Individual Fishing Quotas

Under Alternative 4b, IFQs would be established for each commercial bottomfish fisherman, allowing them to catch 85 percent of their average catch based on historical landing records. The bottomfish fishing year would start on January 1, and may be conducted throughout the year until the quota is achieved. Once a commercial fisherman had landed their IFQ, they would not be permitted to catch, land or sell any more bottomfish until the following year.

Successful implementation and enforcement of this alternative would be dependent upon coordination with the State of Hawaii as it would require closure of both state and federal waters.

Under this variation data would need to be analyzed in real time to ensure that fishermen did not exceed their quota. Fishermen would be required to report their bottomfish catches on a per trip basis.

IFQs could be implemented in a number of ways, two methods are outlined here:

1. Provide equal quotas (totaling 85 percent of the fleet-wide 2003 catch) to all historical participants. Under this alternative, historical highliners would get the same quota as part-time fishermen, and vice versa. Variations could provide equal quotas to a subset of all historical participants, such as those most active in recent years.

2. Provide individual quotas that are equal to 85 percent of each and every fisherman's historical catch. Variations could provide similar quotas to a subset of all historical participants, such as those most active in recent years.

Other common methods of allocating IFQs include auction systems in which quotas are auctioned to the highest bidder, and lotteries in which quotas are distributed to the winners of a lottery. Each of these methods may be open to all or some historical participants, or they may be open to a wider group that has not necessarily participated in the fishery.

Commercial fishermen who have failed to report or have under-reported not reported their catches in the past would be disadvantaged under this alternative as they would not have a historical landing record. These fishermen could be forced out of the fishery and the quota system would prevent new entry. In addition, unless there is a mechanism to transfer quotas, family run operations may cease to exist when the current permit holder leaves the fishery.

ALTERNATIVE 5: COMBINATION MEASURES

Alternative 5 would mitigate potential impacts of the stand alone alternatives above by combining modifications of those alternatives. Alternative 5 includes two variations. Alternative 5a would combine a seasonal bottomfish closure with bottomfish IFQs for certain commercial fishing vessels

during the seasonal closure. Alternative 5b would combine seasonal closures with a partial closure of Penguin Bank.

Under both versions of Alternative 5, all vessel operators (both commercial and recreational) targeting bottomfish in the MHI would be required to register their vessels on an annual basis and would be required to complete and submit catch reports detailing their catches, fishing effort, and area fished.

Successful implementation and enforcement of Alternative 5 would be dependent upon coordination with the State of Hawaii as it would require fishing limits and closures in both state and federal waters.

Enforcement of Alternative 5 could consist of shore-based monitoring of landings and sales. Imported bottomfish or bottomfish caught in the NWHI would still be available, and these would need to be certified and tracked to final point of sale. At-sea enforcement would not be required, but occasional checks would supplement shore-side monitoring.

Under both versions of Alternative 5 enforcement would include shore-based monitoring of landings and sales. Imported bottomfish or bottomfish caught in the NWHI would still be available, and these would need to be certified and tracked to final point of sale. At-sea enforcement would be needed during closed seasons and to patrol the area closure in Alternative 5b. To facilitate recognition of bottomfish registered vessels from the air, each vessel would be required to be marked on an unobstructed upper surface with its registration number.

Alternative 5 management measures could be easily fine-tuned through the modification of the closed months and/or the area closed and number of affected fishermen. This would allow adaptive management in response to changes in targets for fishing mortality reduction anticipated to occur as better reporting, data collection and stock assessments become available.

Alternative 5a: Seasonal Closure and IFQs

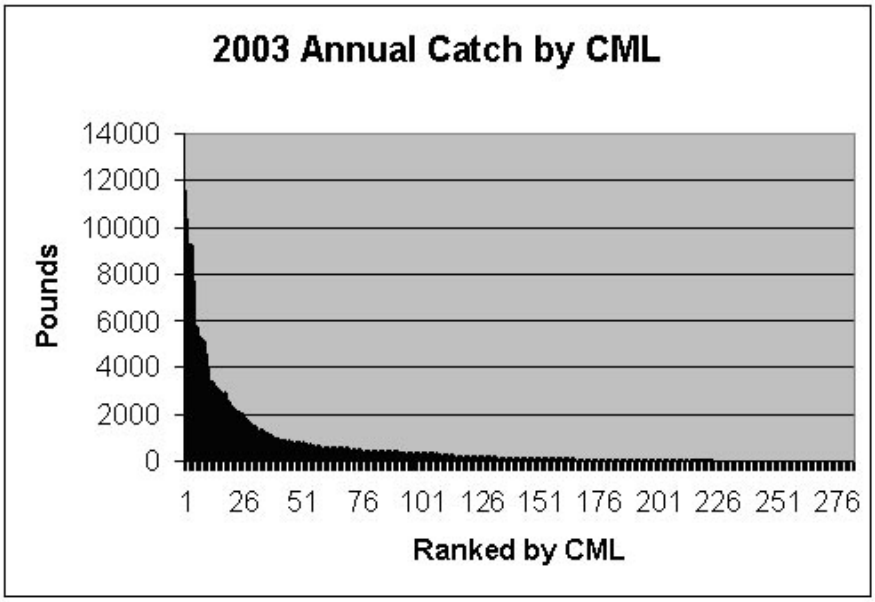
Under Alternative 5a, the MHI bottomfish fishery would be closed during an expanded seasonal closure from May 1 to September 30 of each year, except for a small number of full-time commercial bottomfish fishermen. The exempt fishermen would each receive IFQs for the Deep 7 that they could use during the otherwise closed season (May–September). Once each fisherman's quota was landed, he would be required to stop fishing until the next open season. Based on annual fishery landings data (Table 4), the combined total of all IFQs would equal nearly 28,000 pounds of the Deep 7 species (all species combined) as this is the amount that could be made available for harvest during the otherwise closed season and still maintain the overall annual reduction of 15 percent for the entire MHI.

Table 4: Anticipated Participation and IFQ Levels Under Various Minimum Landing Requirements.

Minimum landing requirement to qualify for May-Sept IFQ	Anticipated number of qualifying participants (based on reported May-Sept MHI landings, 1998-2004)	Anticipated May –Sept. IFQ per qualifying participant (lbs)	Historical May-Sept. mean landings by qualifying participants (lbs)
1-500 lbs	970	29	89
501-1000 lbs	91	308	691
1001-2000 lbs	43	652	1,385
2001-5000 lbs	12	2,335	3,085
More than 5001 lbs	2	14,011	NA

Source: PIFSC Unpublished Data

Figure 13: Annual landings by MHI Commercial Marine License (CML) holders



Each MHI commercial bottomfish fisherman exempted from the summer closure would be issued a set of bottomfish stamps, with each stamp representing a certain number of pounds of bottomfish and all of the stamps totaling the vessel's IFQ for the otherwise closed season. The fisherman would be required to submit a stamp to the dealer at the point of sale. If the fisherman sold fish in excess of the number of bottomfish pounds for one stamp, he would be required to surrender a second stamp to the dealer. Once all the stamps were submitted, the fisherman would be prohibited from fishing until the open season. The exempt fishermen would also be expected to submit catch reports at the end of each trip.

As in Alternative 4, IFQs could be calculated and provided in equal amounts to all qualifying fishermen, or they could be calculated and provided such that each qualifying fisherman's quota was proportionate to his historical catch. However, in either case, the sum of the IFQs would not exceed the 28,021 pounds available for harvest.

This alternative would minimize the economic impact of the closure by ensuring that the local market has a continuous supply of MHI bottomfish.

Alternative 5b: Seasonal Closure and Area Closure

Alternative 5b combines a seasonal closure from June 1 to August 31 of each year for the MHI with a year-round partial closure of Penguin Bank. All MHI bottomfish fishermen would be prohibited from targeting, landing, or selling the Deep 7 species from the MHI during the summer. However, the year-round partial closure of Penguin Bank would enable the length of the summer closure to be reduced as compared with other alternatives.

The area closure would have to be enforced via at-sea monitoring, and shore-based monitoring of landings would also be required. To facilitate recognition of bottomfish registered vessels from the air, each vessel would be required to be marked on an unobstructed upper surface with its registration number.

This alternative would impact all bottomfishing sectors equally, but the impact of the seasonal closure on bottomfish fishermen and the market would be minimized.

Table 5: Summary of Alternatives Under Consideration

	Alt. 1 - No Action	Alt. 2 a- Close PB and MB	Alt 2 b- 15 BRFAs	Alt. 3 - Summer Closure	Alt. 4a – Fleet-wide TAC	Alt. 4b - Comm. IFQ	Alt. 5a – Expanded "Summer" Closure & select IFQ exemption	Alt. 5b – Reduced Summer Closure & Partial PB Closure
Continues State's bag limit, bottomfish vessel registration and RFAs	✔	✔	✔	✔	✔	✔	✔	✔
Continues commercial catch reporting requirement	✔	✔	✔	✔	✔	✔	✔	✔
Requires catch reporting by recreational bottomfish fishermen		✔	✔	✔	✔	✔	✔	✔
Requires at-sea enforcement and aerial surveillance markings on bottomfish vessels		✔	✔					✔
Requires State & federal mirror regulations			✔	✔	✔	✔	✔	✔
Requires shore-based enforcement of landings &/or monitoring by dealers plus certification & tracking of NWHI & imported bottomfish				✔	✔	✔	✔	✔
Requires fishermen to report their catches on a per trip basis					✔	✔	✔	
Requires issuance of bottomfish stamps							✔	
Includes new limits on recreational fishermen		✔	✔	✔	✔		✔	✔

Table 6: Summary Impact Comparisons of the Alternatives

	Alternative 1: No Action	Alternative 2: Area Closures	Alternative 3: Seasonal Closure	Alternative 4: Catch Quotas	Alternative 5: Combination Measures
Target Species	(-) Continued overfishing. (-) Does not meet MSA requirements. (?) The impact of a revised State of Hawaii bottomfish management regime. (-) Recreational fishermen would continue not to be required to submit catch reports, and the recreational catch component would continue to be unknown	2a: (+) Anticipated to reduce landings by up to 16 percent based on historical catch. 2b: (+) Anticipated to reduce landings by at least 15 percent based on 2004 catch. (+) Closed areas may help replenish stocks in adjacent habitat (i.e. spillover). (+) Recreational catch data collection would be improved with new reporting requirements. (-) Fishing effort may increase in open areas reducing benefits of closures & depressed CPUE in those areas fished.	(+) Anticipated to reduce landings by up to 17 percent based on historical catch. (+) May protect bottomfish summer spawning aggregations & reduce mortality on spawning fish increasing biomass over time. (+) Recreational catch data collection would be improved with new reporting requirements. (-) Fishing effort may increase during open periods reducing overall benefit.	(+) Anticipated to reduce landings by up to 15 percent based on historical catch. (+) Sets hard limits on amount of fish caught. (+) Recreational and commercial catch data collection would be improved with new, timely reporting requirements. (-) Lack of robust stock assessments may lead to errors in setting harvest limits. (-) Poor, missing data on catch especially in recreational fishery may lead to errors in setting harvest limits. (-) May lead to high-grading and thus no net decrease in mortality.	(+) Anticipated reduce landings by up to 15 percent based on historical catch. (+) Both options would reduce fishing mortality. (+) Both options would reduce bottomfish landings during closed season. (+) Recreational catch data would be improved. 5a: (+) May protect bottomfish spawning aggregations & reduce mortality on spawning fish, increasing biomass over time. 5a: (-) Lack of robust stock assessments may lead to errors in setting harvest limits. 5b: (+) Closed areas may help replenish stocks in adjacent habitat (i.e. spillover). 5b: (-) Fishing effort may increase in open areas reducing benefits of closures.

Legend: (+) positive, (-) negative
(?) unknown, (n) neutral

	Alternative 1: No Action	Alternative 2: Area Closures	Alternative 3: Seasonal Closure	Alternative 4: Catch Quotas	Alternative 5: Combination Measures
Nontarget Species and Bycatch	(n/+) If the decline in fishing effort continues, there may be a decline in catch of nontarget spp. (n) Bycatch data in the MHI has only recently been reported, but is estimated to be minimal, and disproportionately limited to a few number of species which likely survive when discarded.	(+) Catch of nontarget spp. would be eliminated in closed areas. (n/-) Increased effort in open areas may locally increase number of bycatch in those areas. (+) Recreational catch data collection would be improved with new reporting requirements.	(n/-) Increased effort during open period may lead to increased catches of non-target species, especially for species more abundant during the open season. (n) Bycatch is minimal, so reduction in bycatch would be minimal. (+) The minimal bycatch levels would be eliminated during closed period. (+) Recreational catch data collection would be improved with new reporting requirements	(-) If annual quota is met, effort to catch normally non-target species may increase. (n) Bycatch in deep handline fishery is minimal so reduction in bycatch would be minimal. (-) High-grading may increase bycatch, including that of target species. (+) Recreational catch data collection would be improved with new reporting requirements	(n) Bycatch is minimal so reduction in bycatch would be minimal. 5a: (-) Highgrading may increase bycatch, including that of target species. (+) Recreational catch data collection would be improved with new reporting requirements
Protected Species	(n) Rare interactions between bottomfishers and protected species. A decline in bottomfishing, it is expected that there will be a proportional reduction in the potential of an interaction.	(+) Potential minor benefits in preventing possible interactions in closed areas. (n) Impact of potential increased effort in open fishing areas likely negligible as interactions are rare.	(+) The possibility of protected species interactions would be eliminated during closed period.	(n/+) An enforced reduction in landings and possible shortened season may result in a proportional reduction of potential interactions.	(+) Possible minor benefits in preventing potential interactions.

	Alternative 1: No Action	Alternative 2: Area Closures	Alternative 3: Seasonal Closure	Alternative 4: Catch Quotas	Alternative 5: Combination Measures
EFH, Biodiversity, & Ecosystem	(n) Bottomfishing has a negligible impact on habitat due to gear and methods used, nor significant adverse effects on biodiversity or ecosystems.	(n) Bottomfishing has a negligible impact on habitat due to gear and methods used, nor significant adverse effects on biodiversity or ecosystems. (n/+) Negligible or slightly positive effects by less fishing effort in closed areas. (?/-) Potential for localized negative effects if bottomfishing effort is too highly concentrated in open areas with suitable habitat.	(n) Bottomfishing has a negligible impact on habitat due to gear and methods used, nor significant adverse effects on biodiversity or ecosystems. (+) Potential negative impacts on EFH, biodiversity, and ecosystems would be eliminated during closure period. (?/n) The impacts of a potential increased level of effort during open season are unknown, but likely minimal.	(n) Bottomfishing has a negligible impact on habitat due to gear and methods used, nor significant adverse effects on biodiversity or ecosystems. (+/n) No likely effect on EFH or slight positive effect by less fishing presence once the TAC is reached.	(n) Bottomfishing has a negligible impact on habitat due to gear and methods used, nor significant adverse effects on biodiversity or ecosystems. (+/n) No likely effect on EFH or slight positive effect by less fishing presence once an IFQ is reached and due to no bottomfishing during closure period.

	Alternative 1: No Action	Alternative 2: Area Closures	Alternative 3: Seasonal Closure	Alternative 4: Catch Quotas	Alternative 5: Combination Measures
Fishing Sectors	(-) Continued overfishing would lead to decreased landings.	2a: (+) Closure of Penguin Bank, the most productive bottomfish area in the MHI, may result in failure of full-time bottomfishing and multifishery operations. 2a: (-) Impact to all sectors will not be distributed evenly throughout the islands; greatest impact will be to Oahu and Kauai based fishermen. 2b: (n) Proposed closures may impact small boat recreational and commercial fishermen if forced to travel farther to bottomfish.	(+) Impacts distributed evenly throughout all fishing sectors. (+) Pelagic troll fishery is active and a viable alternative for MHI bottomfishers. (n) Historically there are higher monthly bottomfish landings during the proposed open season.	(+) Commercial bottomfishers who have correctly reported their catch will lose less than those who have not reported or have underreported their catches. (-) Fishermen with poorly documented catch records may be squeezed out of the fishery. (-) May restrict new entry into the fishery.	5a: (+) Commercial bottomfishers who have correctly reported their catch will lose less than those who have not reported or have under-reported. 5a: (+) Pelagic troll fishery is active and a viable alternative for MHI bottomfishers. 5a: (-) Fishermen with poorly documented catch records may be squeezed out of the fishery. 5a: (-) May prevent new entry into the fishery. 5b: (+) Impacts distributed evenly throughout fishing sectors, but Oahu fishing sectors likely more affected. (+) Pelagic troll fishery is active and a viable alternative for MHI bottomfishers

	Alternative 1: No Action	Alternative 2: Area Closures	Alternative 3: Seasonal Closure	Alternative 4: Catch Quotas	Alternative 5: Combination Measures
Fishing Communities	(-) Continued overfishing may reduce the social and economic benefits of maintained fishing opportunities.	2a: (-) Disproportionate localized economic and social impacts to Oahu and Kauai fishing communities. 2b: (n/-) Impacts more or less evenly distributed, with slightly higher impact to Kauai fishing community as there are five proposed closed areas within nearby waters. 2b: (-) Potential negative impact on communities located near proposed areas closures.	(+) Impacts distributed evenly across the state. (+) The fishery would not be closed during holiday season when red bottomfish are most desired by local communities. (-) Marginal impact if seasonal closure is implemented during historically low periods of fishing effort and landings.	4a: (+) A TAC would likely affect all fishing communities equally. 4b: (+) Distribution of IFQs recognizes past participation and experience in fishery. 4b: (-) For those fishing communities whose commercial fishermen have poorly documented catch records may be squeezed out of the fishery.	5a: (+) Distribution of IFQs recognizes past participation and experience in fishery. 5a: (-) For those fishing communities whose commercial fishermen have poorly documented catch records may be squeezed out of the fishery 5b: (+) Seasonal closure evenly distributes impacts across the state 5b: (-) Partial closure of Penguin Bank may result in disproportionate localized economic and social impacts to the Oahu fishing community.

	Alternative 1: No Action	Alternative 2: Area Closures	Alternative 3: Seasonal Closure	Alternative 4: Catch Quotas	Alternative 5: Combination Measures
Native Hawaiian Communities	(-) Continued overfishing would lead to decrease in CPUE and available bottomfish.	(-) Any curtailment or reduction of access rights & cultural practices reduces the ability to continue the culture and may be seen as a permanent loss of culture, especially for those Native Hawaiians who reside on Oahu and Kauai. 2b (-): Potential negative impacts to Native Hawaiian communities that are located near proposed area closures.	(+) Impacts distributed evenly across state. (n/-) Marginal impact if seasonal closure is implemented during historically low periods of fishing effort. (-) Any curtailment or reduction of access rights & cultural practices reduces the ability to continue the culture and may be seen as a permanent loss of culture.	(-) Any curtailment or reduction of access rights & cultural practices reduces the ability to continue the culture and may be seen as a permanent loss of culture.	(-) Any curtailment or reduction of access rights & cultural practices reduces the ability to continue the culture and may be seen as a permanent loss of culture.

	Alternative 1: No Action	Alternative 2: Area Closures	Alternative 3: Seasonal Closure	Alternative 4: Catch Quotas	Alternative 5: Combination Measures
Administration and Enforcement	(+) No impacts or additional costs. (n) Continue to monitor the status of the fishery. (-) Would continue to have limited data, especially for recreation fishing effort & landings hindering future management efforts.	2a: (+) Penguin Bank is a large area close to Oahu that will make it easier to enforce and monitor. 2a: (-) Middle Bank is farther from Oahu and would likely be monitored via air surveillance (costly) than by boat by USCG. (-) Requires a research monitoring program to be implemented to measure effectiveness. 2b: (+/-) May allow the force of federal jurisdiction to enhance state jurisdiction in the MHI, but multiple relatively small closed areas with open areas in between are difficult to enforce. 2b: (-) Historically, DOCARE has been under-funded and has lacked the ability to adequately enforce proposed areas closures in state waters. Burdening USCG with enforcing closed areas could negatively affect	(n/-) Requires enhanced state and federal coordination. Similar rules would need to be established by both state and federal agencies. (-) Certification of imported and NWHI bottomfish will be needed. (-) Administrative and enforcement costs will increase over current levels. (+) At-sea and air enforcement, which is costly, would be minimal; can be enforced through dockside enforcement or monitoring of markets and dealers. Could use existing dealer reporting program to check sales and landings.	4a: (-) Closely monitoring of catch reports may require more resources. 4a: (+) Costly at-sea and air enforcement not required unless quota is met. 4a: (-) All bottomfish sold would have to be tracked to point of sale. 4b: (-) Implementing and monitoring IFQs would likely require additional resources. 4b: (-) Enforcement would be difficult catch fishermen who exceed their IFQ.	5a: (-) Closely monitoring of catch reports may require more resources. 5a: (-) Enforcement would be difficult catch fishermen who exceed their IFQ. 5b: (+) Penguin Bank is close to Oahu allowing it easier to enforce and monitor. 5b: (-) Enforcement of closed areas requires at-sea and air enforcement, which is costly.

	Alternative 1: No Action	Alternative 2: Area Closures	Alternative 3: Seasonal Closure	Alternative 4: Catch Quotas	Alternative 5: Combination Measures
Regional Economy	(-/n) Continued overfishing may eventually lead to a collapse of the bottomfish fishery in the MHI.	2a: (-/n) Closure of Penguin and Middle Banks may slightly affect the impact Oahu and Kauai fishermen's contribution to the regional economy. 2a (-) Total Penguin Bank closure would likely impact Oahu bottomfish fishermen's ability to supply local sashimi markets. 2b: (-) Statewide closures may have slight effects on economy statewide. (-) May encourage importation of lesser quality products that will further erode the market for local bottomfish in local markets. (-) May encourage increased importation of similar products that may facilitate the supplanting of the traditionally high-priced local bottomfish species.	(+) Seasonal closure would be during period of historically slow bottomfishing activity. (+) Winter months and important holiday seasons would remain open when red fish is most desired by local communities. (-) MHI bottomfish product would be eliminated from market during closure period. (-) MHI Bottomfish fishermen may lose market channels due to higher levels of imports.	(+) Local bottomfish market channels likely to be maintained, unless quotas are met. (-) With reduced bottomfish landings there will be a loss of revenue. (-) If quotas are met, imports of bottomfish are likely to increase above the current level of an average 750,000 pounds.	5a: (+) IFQs for small proportion of commercial fishermen would provide markets with MHI bottomfish during closed season; less reliance on imports during closed season. 5b: (n/-) Partial closure of Penguin Bank may slightly impact Oahu bottomfish fishermen's ability to supply local sashimi markets.

V. Public Outreach and Solicitation

As shown below, since 2003 the Council has held a series of Fishers Forums and public meetings to solicit comments from fishermen and the public on the need to improve the health of MHI bottomfish stocks. HDAR has participated in this process by reporting on the status of their review of the MHI bottomfish restricted fishing areas and management efforts. Comments received at these meetings have helped to shape the above alternatives.

2003
Jul 30 Hale Oihana, Lihue, Kauai
Aug 1 Komohana Ag Complex, Hilo, Hawaii
Aug 2 King Kamehameha Hotel, Kailua-Kona, Hawaii
Aug 7 Maui Community College, Kahului, Maui
Aug 19 Honokohau Harbor, Kona, Hawaii
Oct 1 Heeia State Park, Kaneohe, Oahu

2004
Mar 23 Hawaii Convention Center, Honolulu, Oahu
Jun 23 Ala Moana Hotel, Honolulu, Oahu
Oct 13 Pagoda Hotel, Honolulu, Oahu

2005
May 13 Naniloa Hotel, Hilo, Hawaii
May 19 Council Office, Honolulu, Oahu
June 1 Ala Moana Hotel, Honolulu, Oahu
Dec. 12 University of Hawaii-Hilo Campus Center, 200 W. Kawili St., Hilo, Big Island
Dec. 13 King Kamehameha Hotel, 75-5660 Palani Rd., Kona, Big Island
Dec. 14 Chiefess Kamakahelei Middle School, 4431 Nuhou St., Lihue, Kauai
Dec. 15 Maui Beach Hotel, 170 Kaahumanu Ave., Kahului, Maui
Dec. 20 130th Council meeting and public hearing, 1164 Bishop St., Suite 1400, Honolulu, Oahu

2006
Jan 6, 6-9 p.m., Lanai High & Elementary School cafeteria, Lanai City, Lanai
Jan 7, 1-4 p.m., Mitchell Pauole Centre conference room, Kaunakakai, Molokai
Jan 9, 6-9 p.m., University of Hawaii-Hilo, Campus Center Hilo, Hawaii
Jan 10, 6-9 p.m., King Kamehameha Hotel, Kona, Hawaii
Jan 11, 6-9 p.m., Maui Beach Hotel, Kahului, Maui
Jan 12, 6-9 p.m., Ala Moana Hotel, Honolulu, Oahu
Jan 13, 6-9 p.m., Chiefess Kamakahelie Middle School, Lihue, Kauai

The Council will continue to seek public comment on management options at the scheduled meetings below:
March 2, 6-9 p.m., Maui Beach Hotel, Kahului, Maui, Hawaii
March 3, 6-9 p.m., Helene Social Hall, Hana, Maui, Hawaii
March 6, 6-9 p.m., University of Hawaii, Hilo Campus Center, Hilo, Hawaii
March 7, 6- 9 p.m. Naalehu Elementary School, Naalehu, Hawaii
March 8, 6-9 p.m., Kohala High School, Kapaau, Hawaii
March 9 6-9 p.m., Mitchell Pauole Center Conference Room, Kaunakakai, Hawaii
March 10, 6-9 p.m., Kapaa High School, Kapaa, Hawaii
March 14, 6-9 p.m. Ala Moana Hotel, Honolulu, Hawaii

A public hearings will also take place during the 131st Council meeting scheduled March 13-16, 2006, during which the Council is expected to take final action regarding its recommended alternative to forward to the Secretary of Commerce for approval and implementation.

For more information, contact Mark Mitsuyasu at the Council office by phone (808) 522-6040; fax (808) 522-8226 or email mark.mitusyasu@noaa.gov or visit the Council website at www.wpcouncil.org. Send in written comments by January 16, 2006