

3.0 SUMMARY

This revised FMP proposes a program for regulating and monitoring the harvesting of billfish, mahimahi, wahoo and oceanic sharks in the U.S. FCZ of the central and western Pacific Ocean. The FMP presents regulations and reporting requirements governing the take of billfish, mahimahi, wahoo and oceanic sharks by foreign fishing vessels in U.S. waters surrounding Hawaii, Guam, American Samoa and U.S. island possessions in the Pacific Ocean. Other than proposing to control the use of drift-gillnet gear through issuance of special experimental fishing permits, the revised FMP does not propose any other controls on the catches of billfish and associated species by domestic fishing vessels. The FMP proposes strengthening of State and Territorial data collection programs and the sampling activities to better monitor participation in the domestic fisheries for billfish and associated species. The effectiveness of the management program in meeting the Councils objectives and the need for changes in the FMP will be evaluated at least every five years.

3.1 Proposed Actions

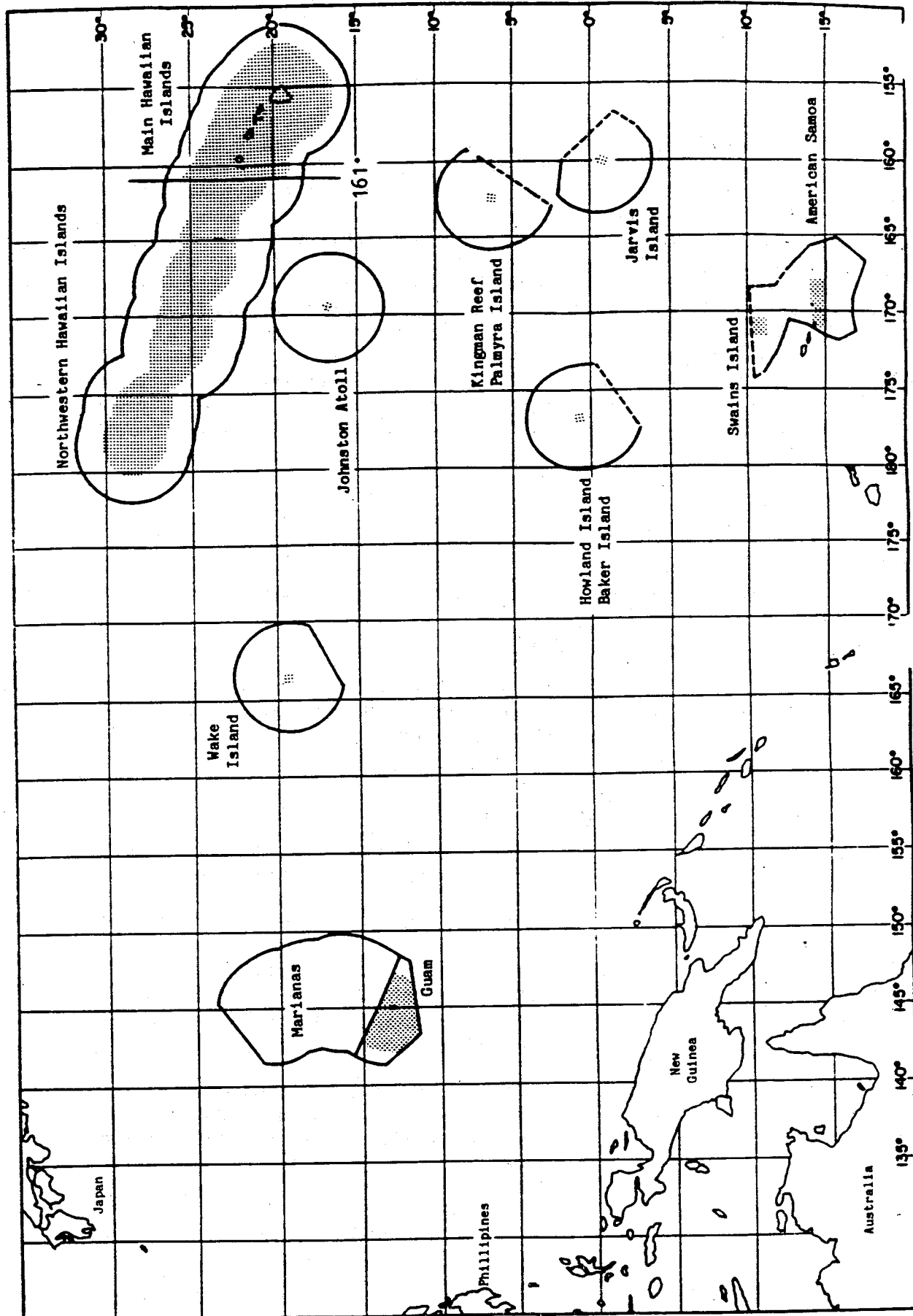
The Council proposes the following measures in this FMP:

Foreign Longliners

1. Area closures: It would be prohibited for foreign longline vessels to fish in the following areas of the U.S. FCZ of the Western Pacific Region:
 - a. Within 150 miles of the main Hawaiian islands (east of 161° W. longitude);
 - b. Within 100 miles of the Northwestern Hawaiian Islands (west of 161° W. longitude) including Midway island;
 - c. Within 150 miles of Guam;
 - d. Within a rectangle around the principal islands of American Samoa bounded by 14° S. and 15° S. latitude and 168° W. and 171° W. longitude, and within a one degree (1°) square surrounding Swains island; and
 - e. Within 12 miles of each U.S. Pacific island possession except for Midway island. While Midway island is a possession of the United States, it is being treated as if it were a part of the State of Hawaii for the purpose of the FMP.

These areas which would be closed to foreign longline fishing are graphically depicted in Figure 3.1.

FIGURE 3.1 - AREAS (SHADED) OF THE U.S. FCZ SURROUNDING HAWAII, GUAM, AMERICAN SAMOA, AND U.S. POSSESSIONS RECOMMENDED TO BE CLOSED TO FOREIGN LONGLINE FISHING UNDER THE PROPOSED ACTION



2. Permits: Foreign longline vessels would be required to obtain permits prior to fishing in the open areas of the FCZ.
3. Effort plans: Foreign longline vessels would be required to file effort plans two (2) months prior to entering the open areas of the FCZ for fishing purposes.
4. Catch and effort limits: There would be no limit on the amount of fishing or the amount of catch of any species of fish made by foreign longline vessels in the open areas of the FCZ.
5. Reporting: Foreign longline vessels would be required to collect catch and effort data and data on sea turtle and marine mammal interactions on forms provided by the NMFS and to submit those data to the NMFS within two (2) months of leaving the FCZ.
6. Observers: Foreign longline vessels would be required to carry observers when so directed by the Regional Director, Southwest Region, NMFS, in accordance with the MFCMA.

Foreign Drift-Gillnetters

1. Prohibition: It would be prohibited for foreign vessels to use drift-gillnets anywhere in the FCZ of the Western Pacific Region.

Domestic Drift-Gillnetters

1. Experimental permits: It would be unlawful for domestic vessels to use drift-gillnets in the FCZ unless first authorized by a special experimental fishing permit issued by the Regional Director of the NMFS.
2. Reporting: Domestic drift-gillnetters would be required to collect catch and effort data and data on sea turtle and marine mammal interactions on forms provided by the NMFS and to submit such data to the NMFS within three (3) days of landing.

Foreign Pole-and-Line Tuna Vessels, Foreign Purse Seine Tuna Vessels, and Domestic Purse Seine Tuna Vessels

1. Catch and effort limits: There would be no limit on the amount of fishing or the amount of catch of tuna and non-tuna species made by these classes of vessels in the U.S. FCZ of the Western Pacific Region.
2. Data collection: The State Department, in cooperation with the NMFS, shall request voluntary submission of catch records for the species in the management unit taken incidentally to tuna fishing by these classes of vessels. These vessels should be

encouraged to collect data on their catches of the management unit species made in the U.S. FCZ. If information on incidental catches is not obtained within one year of the effective date of this FMP, then the Council shall consider making it mandatory to report incidental catches made by these vessels on a fishery-by-fishery basis and on a Country-by-Country basis.

Other Domestic Vessels

1. No restrictions: No Federal requirements would be added at this time.
2. Data collection: The Western Pacific Fishery Information Network (WPACFIN), a central source of region-wide fisheries data maintained by the NMFS, would be used to monitor the activities of domestic vessels, assisted by existing Territorial and State licensing and data reporting and collection programs. Sampling would be used for estimating the levels of fishing effort and catches in the recreational fisheries for the management unit species in Hawaii and Guam.

Annual Reports

The NMFS, in cooperation with State and Territorial agencies, shall prepare an annual report for the Council by June 30 of each year covering the domestic and foreign fisheries addressed by this plan for the previous year, including a summary of catch (by species), effort, areas of fishing, changes in catch rates for individual species by different gear types and other significant changes in the various fisheries for the management unit species and tuna in tropical waters of the widely dispersed American flag islands in the Pacific Ocean.

Five-Year Review

The Council in cooperation with the NMFS and State and Territorial agencies shall conduct a full review of the FMP in five years. The review will assess the effectiveness of the FMP in meeting the Council's objectives, the need to revise the objectives, and the need for making changes in any of the management measures including adjustments of area closures, and adding new measures such as data collection or reporting requirements for the domestic fisheries which take the management unit species in conjunction with the tunas.

3.2 Need for the FMP

The FMP is needed to provide a framework for promoting domestic recreational and commercial fisheries for billfish, mahimahi, wahoo and oceanic sharks in the FCZ, while eliminating the inherent weaknesses of the PMP which is now in force. The PMP which has been in effect since April 1, 1980, was intended to provide an interim response to MFCMA requirements for a plan to govern foreign fishing for tuna which would continue under the PMP. It was assumed that longline vessels would catch approximately as much tuna and non-tuna species in the FCZ under the PMP as they did before the PMP went into effect. In fact, the stated intent of the PMP is to perpetuate the status quo. The effect of the PMP, however, has been just the opposite from the intended outcome. This demonstrates the inherent weaknesses of the PMP. First of all, there has been no legal foreign longline fishing in the FCZ of the entire Western Pacific Region since the PMP became effective in April 1980, although many permits have been issued. Nearly two thousand foreign longline vessels have obtained permits since the inception of the PMP but no vessel has actually fished in the FCZ with the permits issued under the authority of the PMP. The PMP's complex of quotas, non-retention requirements, check-in and check-out procedures, and observer requirements is apparently being viewed by foreign longline fishermen as being too burdensome to comply with and simply not worth the hassle. The avoidance of the entire FCZ of the Western Pacific Region, an area larger than 1.5 million square miles, by foreign longline vessels is neither necessary nor desirable. The PMP, in result, has turned out to be a contradiction of U.S. tuna policy. The FMP, on the other hand, proposes to simplify the management program for foreign longline vessels so that they will have a reasonable opportunity to fish for tuna in relatively large parts of the FCZ of the Western Pacific Region. The FMP would be much more equitable to the foreign participants in the tuna fisheries conducted in the U.S. FCZ.

There is also no certainty with respect to outcomes under the PMP. While foreign longline vessels so far have stayed out of the FCZ under the PMP, there is always the prospect that they might enter any part of the FCZ and start fishing in fairly large numbers. The number of permit applications has risen steadily since 1983 when no foreign longline vessels applied for a permit to fish in the FCZ of the Western Pacific Region. This poses several problems. If many foreign longline vessels were to simultaneously enter the FCZ, it would be virtually impossible to enforce the provisions of the PMP without first having a very large increase in current enforcement budgets. Also, while it appears that catches and catch rates for billfish and associated species made by domestic fishermen have increased during the past five years, it is not known if this is due to natural changes in the abundance or availability of the pelagic species in the management unit, or is due to increases in the local abundance of the management unit species because of relocation of foreign longline effort out of the FCZ, or due to other conditions. Normally, there is considerable variability in stock abundance and availability for pelagic species in general, and more years of catch and effort data on fishing for the species in the management are needed in order to more confidently establish relationships between the foreign and domestic fisheries for the management unit species. However, under the PMP, foreign longline vessels could enter any part of the FCZ. This would make moot or, at best, greatly complicate efforts to establish whether domestic

fishermen have, in fact, benefited from the relocation of foreign longline vessels out of the FCZ, especially from areas which are considered most important to domestic fishermen. The FMP would minimize the problem of uncertainty by establishing a fixed set of area closures to foreign longline fishing for five years to allow reasonable time for the effects of area closures to be better documented.

The PMP is not easy or cost-effective to administer and to enforce. As long as foreign longline vessels refrain from fishing in the FCZ, this is not a problem. At present, aerial surveillance is sufficient for monitoring foreign fishing activity in the FCZ, and fairly large areas of the U.S. FCZ can be covered at reasonable cost. If a substantial number of foreign longline vessels do begin fishing in the FCZ, however, the problem would become serious. At-sea enforcement would be required to check on compliance with the PMP's quotas, non-retention zones, and manner of releasing fish requirements in the FCZ once the quotas of individual species are reached. Neither the NMFS nor the Coast Guard have the staff and ships needed for such at-sea enforcement on a continuing basis. The FMP deals with the enforcement problem by establishing area closures to foreign longlining fishing and by allowing the retention of all fish caught in open areas of the FCZ. The FMP would provide much more freedom for foreign longliners to use their gear effectively in areas of the FCZ which would be open to foreign fishing. Aerial surveillance would be the primary enforcement mode to check for violations in the areas of the FCZ closed to foreign fishing and for unauthorized fishing in the open areas.

The PMP is narrow in scope since it only deals with foreign longline vessels. It does not address other types of foreign fishing for pelagic species, nor can a PMP deal with domestic fisheries. The FMP would address these problems in several ways. The FMP proposes to prohibit foreign vessels from using drift-gillnets anywhere in the FCZ of the Western Pacific Region. The FMP also proposes to control the use of drift-gillnets in the FCZ by domestic fishermen through an experimental fishing permit procedure in order to prevent gear conflicts and to maintain the values associated with the established domestic fisheries for the management unit species. The FMP also proposes that the State Department and NMFS establish systematic data collection procedures through voluntary means in order to determine the magnitude of incidental catches of the management unit species made in the FCZ by foreign pole-and-line tuna vessels and by foreign and domestic purse seine vessels. This information is needed to determine if any controls covering the management unit species might be needed for these fisheries in the future. Prohibiting the use of drift-gillnets by foreign vessels would eliminate the risk of adverse effects on endangered and threatened species and marine mammals such as Hawaiian monk seals, sea turtles, humpback whales and porpoises. In addition, the FMP would establish a fishery monitoring system so that the effectiveness of the management program can be evaluated, and problems can be identified and resolved should they arise, whether in the domestic or the foreign fisheries which take the management unit species.

Finally, the FMP provides a better vehicle than the PMP for furthering the development of international agreements initially for securing access for fishing for tuna and eventually for managing all migratory pelagic fish species throughout their range in the Pacific. The easing of access to the FCZ for

foreign longline fishing for tuna should be viewed as a demonstration of the U.S. Government's interest in maintaining good relations with nations which are equally interested in the long-term productivity of stocks of highly migratory species and in gaining access to fish for tuna in exclusive economic zones. The U.S. is now engaged in negotiations with sixteen Pacific Island States regarding a regional tuna access agreement. Areas closed to fishing by the U.S. purse seine fleet is an important issue in these negotiations. This FMP is not precedent setting in any way regarding establishing of area closures to fishing for highly migratory species.

In summary, the FMP is needed to achieve the objectives chosen by the Council (Section 4.2) while at the same time avoiding the problems associated with the PMP. The program proposed in this FMP provides a more equitable, certain, cost-effective, and comprehensive program for monitoring and managing the fisheries for pelagic species in the FCZ much better than under the PMP.

3.3 Consistency with MFCMA National Standards

The measures proposed by the FMP are intended to achieve optimum utilization of billfish and associated fishery resources in the FCZ in accordance with the National Standards of the MFCMA:

1. Prevent overfishing of the management unit species while achieving the optimum yield (OY) - Not much can be done in the FCZ alone to prevent overfishing of billfish, mahimahi, wahoo and oceanic sharks because only a small portion of total fishing mortality of these species throughout their range is the result of fishing pressure on these species in the FCZ. There are, however, conservation benefits stemming from the FMP which do not arise under the existing PMP. The FMP would eliminate the waste of fish associated with the PMP's non-retention approach which requires the release of dead or dying fish hooked on longline gear. Under the FMP, foreign longline vessels would be allowed to retain all of their catches. Second, the proposed fishery monitoring program will provide a sounder basis for implementing conservation measures in the FCZ if they are found to be needed in the future. The revised FMP incorporates an annual report requirement designed to identify problems in the future so that they can be acted on rapidly. There also will be a thorough re-evaluation of the plan at least every five years to determine the need for adjustments in area closures or changes in other measures. In the meantime, the OY for billfish, mahimahi and wahoo will be achieved by domestic fishing for these species in areas of the FCZ which are important to domestic fishing interest. Foreign longline, pole-and-line, and purse seine fishing in the FCZ would remain unaffected without immediate constraints placed on their effort or catch.
2. Best scientific information available - The FMP acknowledges the limitations of the available data, but the Council has used the best scientific information available in developing this FMP. The Plan

Development Team has determined that the revised FMP contains the best scientific information and analyses available relating to the impacts on domestic catch rates of the management unit species due to closures to foreign longline fishing in the FCZ. The Council's Scientific and Statistical Committee has concluded that the evidence presently available supports the presumption that domestic catch and catch rate increases will result as a result of area closures to foreign longline fishing as recommended in this FMP.

3. Management of a stock (or interrelated stocks) as a unit throughout its range - The management unit of this FMP includes mahimahi, wahoo and oceanic sharks in addition to six species of billfish. Each of the pelagic fisheries discussed in Section 6.0 takes a mix of the management unit species and tuna although in different proportions.
4. No discrimination between residents of different states - The plan does not propose any differential licensing programs or requirements for residents of different states. Tourists are principal customers of the charter sport fishing industry and out-of-State fishermen are encouraged to participate in the fishery.
5. Promote efficiency in utilization of fishery resources - Other than requiring an experimental fishing permit for domestic drift-gillnet fishing, the FMP does not restrict the times, places, or methods of fishing for the management unit species by domestic fishermen. The evidence available indicates there will be increases in domestic catch rates around the main Hawaiian islands as a result of the area closures to foreign longline fishing. Increased catches by U.S. vessels in American Samoa and Guam also are likely. At the same time, foreign longliners, purse seiners and pole-and-line vessels will be permitted to retain all fish caught in open areas. They will not be required to discard dead fish or to release fish by cutting the line or leader while a fish is in the water as is presently required. Thus, domestic and foreign fishing vessels should become more efficient under the FMP than under the PMP presently in effect.
6. Allow for variations and contingencies - Annual reports on the fisheries and the five-year review requirements of the FMP allow for variation and contingencies to be considered. Year-to-year availability, abundance, and vulnerability of billfish and associated species in the FCZ vary considerably. The FMP cannot control this in any way. However, by restricting the potential for considerable interception of the management unit species by foreign longliners and gillnet vessels in the FCZ before they reach grounds used by domestic fishermen, the FMP is intended to safeguard the potential for good domestic catches in years of high abundance, of the management unit species, and reduce the chance of poor domestic catches in years of their low abundance.
7. Minimize costs and avoid duplication - The FMP proposes a more cost-effective approach than the PMP to regulate foreign fishing; and proposes that current State and Territory data collection procedures

regarding domestic fishing for the management unit species be upgraded and augmented through sampling. Federal costs will remain the same or possibly even decrease relative to the PMP, and there will not be any duplication of effort between Federal and State and Territorial fisheries agencies.

3.4 Alternatives Considered

The Council considered a large number of alternatives in selecting the proposed actions (Section 7). These alternatives include different management strategies and different combinations of management measures. The alternatives were found to offer less chance of achieving the objectives of the FMP compared to the proposed action(s).

Continued reliance on the PMP was rejected because the PMP has undesirable impacts regardless of whether or not foreign fishing occurs. If foreign fishing did occur, there would be a waste of billfish and other species, enforcement burdens would be extremely high, and compliance by foreign vessels would be next to impossible to monitor. There could be gear conflicts, and there would be little likelihood that catches and catch rates of the management unit species of domestic fishermen would increase. On the other hand, while domestic vessels are benefiting from the virtual de facto closure of the entire FCZ of the Western Pacific Region under the PMP, a closure of such extent is unnecessary. Some of the constraints on foreign fishing vessels can be reduced so that a reasonable opportunity to fish for tuna is maintained especially in the FCZ of U.S. island possessions in the Pacific.

Amendments to the PMP could address some of the concerns about unnecessary limitations on foreign tuna vessels, but there are drawbacks to this approach. An amended PMP will not provide a basis for addressing current or future domestic fishery problems. For example, a PMP could not establish restrictions on domestic vessels' use of drift-gillnets to catch the management unit species in the FCZ. Implementation of an existing FMP or a preparation of an amendment thereof are more likely to proceed rapidly than preparation, approval and implementation of a new PMP. Amendment of the PMP would take additional time, since the MFCMA, National Environmental Policy Act (NEPA), and other laws would require developing a new draft and final document for public review. This would duplicate what the Council has already done, with no apparent gain from the decisions ultimately reached.

Alternative FMP strategies considered include limits on foreign catch, limits on foreign fishing effort, different area closures to foreign longliners applied on an annual or seasonal bases, and combinations of catch and effort limits. The common failing of catch and effort limits is the difficulty of establishing rationally-based limits for highly migratory species just for the FCZ and of implementing or enforcing those limits. A workable foreign catch or effort quota system invariably leads to a requirement for at-sea enforcement and high levels of observer coverage on foreign vessels. The area of the U.S. FCZ

of the Western Pacific Region involved is so large, and there can be so many vessels involved in fishing, that numerical catch and effort quotas are essentially impossible to enforce. In addition, great perplexity can be involved in arriving at appropriate quotas, by area and by species, in any mixed species fishery. The prospect of continuing on with a wasteful non-retention approach is unacceptable to the Council. The Council concluded that area closures to foreign longline and to drift gillnet fishing, with removal of catch and effort limits, would be the best, easiest, and most cost-effective approach to follow.

The Council explored in considerable detail a large number of area closure combinations to foreign longline vessels (Section 7). It is the Council's judgment that any closures smaller than those proposed in this draft FMP (Figure 3.1) would not provide sufficient protection and benefits to domestic interests and would not promote the "optimum use" of billfish and associated species in the FCZ to the extent possible. Small area closures also could result in gear conflicts. Larger area closures to foreign longline fishing would likely not result in significantly larger catches of the management unit species for domestic fishermen but could significantly affect foreign tuna catches in the FCZ. The proposed area closures will promote conservation of the management unit species to the extent possible in the FCZ, by eliminating wastage of fish caused by a non-retention approach, will promote a more optimum utilization of pelagic species in the FCZ by domestic and foreign vessels compared to the PMP; will provide a reasonable opportunity for foreign vessels to maintain (or even increase) their tuna catches in the FCZ; and the fishery can be effectively patrolled and enforced with available resources.

The Council considered starting with smaller area closures to foreign longline fishing and phasing in larger closures as the domestic fisheries for the management unit species expanded. However, such a strategy would not serve the interest of domestic fishermen in the island areas served by the Council. Implementation of the closures to foreign longline fishing and to drift-gillnet fishing recommended in this FMP is very important to domestic fishermen to assure that domestic catch benefits can continue into the future. It will take time to get adequate data to confirm and quantify "cause-and-effect relationships" between the foreign and domestic fisheries for the management unit species and to explain the reasons for the success or lack of success in the domestic catches and catch rates of the management unit species. Potential gains in domestic annual harvests of the management unit species due to the area closures to foreign longline fishing cannot now be estimated with much reliability until there are enough data on domestic harvests and catch rates with area closures to foreign longliners in effect for a continuous series of years. Therefore, the Council has concluded that the FMP should start with relatively large area closures which could be adjusted downward if they are found to be larger than necessary and still provide sufficient protection to domestic fishing interests. A complete evaluation of the effectiveness of this approach will be made in five years.

The Council concluded that no restrictions on domestic fishing effort (except for controlling drift-gillnet gear) or catches are necessary at this time for ecological, economic or social reasons. It would be irrational to control catches of the management unit species by domestic island fishermen in the absence of international cooperation and agreements for conservation of

highly migratory pelagic species when the catches by fishermen in island areas served by the Council are a small fraction of ocean-wide catches. Domestic fishermen would suffer with no measurable improvement in the productivity of the stocks of the management unit species. Further, domestic fishermen clearly place a much higher value on the management unit species than do foreign long-line and pole-and-line fishermen and purse seiners who instead prefer catching tunas.

There are no economic or social conflicts in the domestic fisheries that need to be resolved under the FMP at this time. Charter, trolling, longline and handline fishing by domestic fishermen have expanded in recent years, and there is even crowding in highly productive fishing areas such as around fish aggregating devices. However, this is not a severe problem warranting Federal controls at this time. Drift-gillnet gear is not now being used by domestic fishermen, but there have been expressions for testing drift-gillnets by some domestic fishermen in the island areas served by the Council. There is no indication that significant economic or social gains would accrue from any allocations of fish or fishing space to different domestic fishery sectors. Furthermore, monitoring and enforcing such allocations could be quite costly. Domestic vessels will be free to allocate their effort in the most efficient way possible. However, purse seines and drift-gillnets will be kept away from areas fished with traditional gears and from areas known to have concentrations of marine mammals and threatened and endangered species. The FMP requires that the Council will receive an assessment of the status of the domestic fisheries annually to determine whether actions are necessary to address user conflicts. Monitoring of catches and catch rates for domestic and foreign fishermen will alert the Council to the need for more rapid responses to problems relating to the status of the stocks themselves should they arise in the future.

3.5 Determinations in the FMP

The FMP acknowledges the limitations of available data for precise assessments of stocks of the management unit species throughout their assumed range in the Pacific. The Council concludes that maximum sustainable yield (MSY) levels for the various species of billfish on a Pacific-wide basis are as derived by the Billfish Stock Assessment Workshop (Shomura, 1980), and the MSY levels for mahimahi, wahoo, and oceanic sharks are as presented in the PMP (Section 8).

The OYs for the management unit species in the FCZ are defined in non-numerical terms. The large annual variability in abundance of pelagic species in the FCZ, the large annual variability in historical fishing effort expended by foreign longline vessels in the FCZ of the Western Pacific Region, and the present inability to accurately forecast future catches and catch rates of the management unit species made by foreign and domestic vessels all argue against using a numerical determination of OY. Therefore, the OY for each of the species in the management unit is defined as "the amount of that species which will be caught by domestic and foreign vessels fishing in accordance with the measures contained in this plan" (Section 8).

The domestic annual harvest (DAH) and total allowable level of foreign fishing (TALFF) are likewise defined in non-numeric terms (Section 8). Most of the management unit species caught by domestic fishermen will either be sold to fresh fish markets through established local channels, or be consumed directly by family and friends of local fishermen. Other than what goes into processing of local catches for the fresh fish market and for home consumption, there is virtually no processing of domestic catches of the management unit species in Hawaii, Guam and American Samoa, other than small amounts of marlin used in smoked fish and manufacture of fish cake in Hawaii. The amount of management unit species available for joint venture processing (JVP) with foreign vessels is zero.

3.6 Benefits of the Proposed Action

3.6.1 Conservation

The FMP is unlikely to result in a significant effect on the condition of stocks of the management unit species. This is so because the FCZ is believed to comprise only a small portion of the range of each of the management unit species. However, keeping foreign longliners largely away from the FCZ of the main Hawaiian islands and Guam could be beneficial to conservation of blue marlin since this species is quite abundant in the waters of Guam and the main Hawaiian islands. Hawaii may be an important spawning ground for billfish. Results of plankton collections show that the Hawaiian islands and the waters just to the west of the island chain support large numbers of larvae not only of blue marlin, but of striped marlin and shortbill spearfish as well. However, domestic catches of blue marlin will likely increase thereby offsetting the decreases in catches made by foreign longliners. The FMP will be beneficial in eliminating wasting of the management unit species due to the non-retention provisions of the PMP. The FMP will contribute to conservation in the "wise use" sense of the word. The FMP also will generate better data to identify future problems (if any), and the annual report requirement will provide a basis for taking short-term actions, if necessary, in between the required five-year review of the FMP.

3.6.2 Optimum Yields

The FMP will promote optimum utilization of billfish, mahimahi, wahoo and oceanic sharks in the FCZ. Domestic charter and private sport fishing interests in Hawaii, Guam and American Samoa place extremely high value on all billfish species and on blue marlin in particular. The values associated with mahimahi and wahoo are also very high. Domestic longline and handline fishermen in Hawaii place high values on striped marlin, swordfish, mahimahi and wahoo. These species collectively

contribute as much as 5-20% of the total value of the catch in certain years in the handline and longline fisheries. The fisheries for pelagic species are the largest of the domestic fisheries in Hawaii, Guam and American Samoa and the relative importance of the management unit species is far greater to domestic fishermen than to foreign longliners and drift-gillnetters. In American Samoa, optimum utilization of the management unit species will be achieved by keeping foreign longliners away from the nearshore areas fished by local fishermen and by keeping drift gillnet vessels out of the FCZ altogether. It is important that relatively free access to fish in waters farther from shore be given to foreign longliners in the FCZ of American Samoa since they still deliver significant quantities of tuna processed by canneries in American Samoa. There is very little domestic fishing in the FCZ of U.S. Pacific island possessions and in the FCZ beyond 100 miles from shore of the Northwestern Hawaiian Islands, and optimum utilization may be achieved if all pelagic species are available to foreign vessels throughout those parts of the FCZ of the Western Pacific Region. In the Council's view, the pattern of use likely to occur under the FMP will result in optimum utilization of the management unit species in the FCZ of the Western Pacific Region.

3.6.3 Domestic Fishery Values

Catches of billfish, mahimahi, wahoo and oceanic sharks made in the FCZ by domestic fishermen are expected to increase under the FMP, but catches are but one index of their values. The economic and social values associated with recreational fisheries and supporting businesses are very large, as reflected in the willingness to pay very high costs and to invest large amounts of money in vessels and gear to pursue billfish and associated species and tuna. Sportfishing tournaments have become larger, more numerous, and held more frequently than in the past with participants at some tournaments coming from all over the world. Fishermen would not participate in trophy or jackpot tournaments if there were not a reasonable likelihood or expectation of catching fish. The FMP will not necessarily guarantee an increase in catches and catch rates of billfish, but it will maximize the chances for successful sportfishing opportunities. Precluding foreign drift-gillnet fishing and limiting the risk of foreign longline interceptions of the management unit species in the FCZ will maximize the potential for increased availability of fish for domestic catches and ultimately increased recreational fishery values. Higher catch rates could also be achieved by recreational fishermen by limiting catches made by domestic commercial fishermen in and adjoining the areas fished by recreational fishermen. However, the Council has decided that there is no need to regulate the domestic commercial fisheries for the management unit species at this time, other than drift-gillnet fishing.

Similarly for commercial fishermen, the FMP will provide a greater likelihood that fish will be more available for harvest in the waters around the main Hawaiian islands, along the NWHI chain, Guam, and

in the closure zone around American Samoa. In the Council's view, it is especially important for vessels in a developing fishery to achieve high catch rates while they are still experimenting to find the most effective fishing patterns and techniques. Without high enough catch rates, there will be insufficient economic incentive for domestic fishermen to expand or even continue in the fishery. The FMP will not necessarily guarantee an increase in domestic catches and catch rates, but the proposed closures to foreign longline and drift-gillnet fishing will assure that as much is being done in the FCZ as possible to give domestic fishermen a reasonable chance to achieve high catches of the management unit species.

3.6.4 Foreign Fishing

The FMP will provide better opportunities for foreign longline fishing in the FCZ than under the PMP. Limits on catch of the management unit species would be eliminated in areas where foreign longline fishing would be allowed under the PMP. Catches could be maintained at or even possibly exceed historic levels. Access to the FCZ for foreign longline vessels has been restricted by observer coverage requirements and by the requirement of the PMP to release fish by cutting fishing lines. The cost of foreign fishing operations under the FMP will be less than under the PMP. Foreign fishing vessels are highly mobile, are not reliant on the FCZ for a substantial portion of their catches, and they receive higher prices for striped marlin, swordfish, and bigeye tuna than for blue marlin and yellowfin tuna, the principal species sought by domestic fishermen. Foreign longline catch rates for striped marlin, swordfish and albacore tuna are generally higher around the NWHI than around the main Hawaiian Islands, while bigeye tuna catch rates are nearly identical in both areas. Therefore, while the partial closure of the FCZ in the main Hawaiian islands may result in a change in species composition of the catch, total catches and total revenues of foreign longliners can be maintained or even increased if foreign longline effort from the FCZ of the main Hawaiian islands is redirected to the open area of the FCZ around the NWHI and beyond 150 miles from shore of the main Hawaiian islands.

The dominant billfish species taken by foreign longliners around Guam is blue marlin, while yellowfin tuna are the dominant tuna species taken there. However, the total billfish to tuna catch ratio in the FCZ of Guam is about 1 to 13, which is the same ratio as for the large Pacific Ocean area between 120°E to 180° and 0° to 20°N. This indicates that a substantial shift of foreign longline fishing out of the FCZ around Guam would not materially affect foreign catches and catch values.

3.6.5 Enforcement and Administration

The FMP will be a much simpler program to administer than the PMP. Area closures can be patrolled effectively by aircraft; patrol

requirements by Coast Guard vessels would be minimal under the FMP. Elimination of quotas and non-retention provisions established by the PMP for foreign longline fishermen would greatly reduce monitoring requirements, would simplify compliance with the FMP, and should promote accurate reports of catch and effort. The FMP requirement to file effort plans will facilitate efficient deployment of surveillance flights and efficient administration of the vessel permit program and processing of subsequent foreign catch reports. The effort plans will indicate to NMFS and the Coast Guard when to expect vessels to be operating in different areas of the FCZ and when catch reports will be due from different sources. A cooperatively developed observer program should result in less apprehension by foreign fishing vessels of being required to carry observers on all fishing trips, and will allow observer placements on the types of vessels best suited for such coverage to the extent which is allowed by the MFCMA.

3.6.6 Ecological Impacts

To the extent that foreign longlining is shifted away from green sea turtle breeding grounds in the MWHI at French Frigate Shoals, the risk of interception of turtles in the FCZ on foreign longline gear should be lessened. The requirement for foreign vessels to report incidental taking of or interactions with threatened sea turtles and the endangered Hawaiian monk seals will add to the information base on this matter. The risk of entanglement of Hawaiian monk seals and sea turtles in lost or discarded gillnets in the FCZ is likely to diminish since the FMP will prohibit the use of drift-gillnets by foreign fishermen. Prohibiting the use of foreign drift-gillnets in the FCZ and controlling the use of drift-gillnets by domestic fishermen through an experimental fishing permit procedure will likely reduce the amount of lost or discarded gear washed upon beaches, even through lost netting and other fishing debris from high seas fisheries will still drift into the FCZ.

3.6.7 International Implications

The Council believes that the revised FMP is in conformity with principles for negotiating international agreements to manage highly migratory species of fish. In the Council's view, the FMP is consistent with the MFCMA and with the Law of the Sea (LOS) articles dealing with highly migratory species. The LOS convention enjoins all states involved in exploiting shared stocks (i.e., those ranging beyond or across national exclusive economic zones) to "cooperate directly or through international organizations with a view of ensuring conservation and promoting the objective of optimum utilization of such species throughout the region..." (Article 64). However, no institutional structure nor ground rules are provided by the LOS convention. One can presume that

the general premise of the text of the LOS convention requiring the coastal state to be responsible for the conservation of the fisheries (Article 61) and to promote the optimum utilization of the fishery resources (Article 62) should apply unilaterally in the absence of agreements for international cooperation regarding highly migratory species. The Council endorses the State Department's ongoing negotiations with island nations in the Pacific to achieve international tuna access and management agreements. The Council proposes that the FMP be adopted while such agreements are being developed. In the Council's view, the FMP liberalizes foreign longline vessels' access to tuna and to other highly migratory species in the FCZ and is thus a more consistent basis for negotiating international treaties than the PMP.

3.7 Summary

In summary, the FMP is intended to improve domestic recreational, commercial and subsistence fishery values associated with catches of the management unit species in the long run. The areas most important to domestic fishermen will be reserved for domestic use. Gear conflicts with foreign vessels will be precluded in these areas. Domestic catches are expected to increase in response to these measures. Foreign vessels will have a more reasonable opportunity to fish for tuna in the FCZ compared to what they have now under the PMP. Foreign longline effort and catches can be relocated to open areas without limits or to the high seas. No negative effects on total foreign longline catches in the FCZ or in the Pacific are expected.

The FMP will not have a significant impact on the overall health and productivity of stocks of billfish and associated species throughout their assumed range in the Pacific Ocean. There will not be any negative impact on endangered and threatened species as a result of the proposed action. There will be no irreversible or irretrievable commitments of resources made under this plan, nor will there be any unavoidable adverse effects which would require mitigation. The plan is not expected to affect use of energy or other depletable resources by domestic or foreign vessels. The plan is consistent with the coastal zone management plans of Hawaii, Guam and American Samoa. (Appendix B).

4.0 INTRODUCTION

4.1 Goal of Fisheries Management in the FCZ

The goal of the Council is to secure the approval and implementation of a FMP for billfish, mahimahi, wahoo and oceanic sharks in the FCZ which will be fair and equitable to both domestic and foreign fishermen; will be cost-effective to administer and enforce; and will not impede negotiations toward international agreements for conservation and management of highly migratory species of tuna, billfish, and other migratory pelagic fishery resources throughout their range in the Pacific Ocean.

4.2 Objectives of the FMP

1. To promote the growth of domestic harvests of the management unit species and domestic fishery values associated with these species.
2. To enhance the opportunity for successful recreational fishing experiences for the management unit species by fishermen.
3. To improve the opportunity for domestic commercial fishermen to engage in profitable fishing operations for pelagic species.
4. To enhance the marketability of sportfishing charter-boat services.
5. To promote domestic marketing of the management unit species in lieu of some marketing of these species in Guam and American Samoa by purse seine fishermen and foreign longline fishermen.
6. To eliminate waste of billfish and other management unit species which are taken along with tuna on foreign longline gear, and by purse seine and pole-and-line tuna vessels.
7. To diminish the risk of domestic/foreign gear conflicts in the FCZ, and to preclude the possibilities of gear conflicts in areas of concentrated domestic fishing.
8. To the extent consistent with the above objectives, to minimize interference with fishing for tuna in the U.S. FCZ, with special regard for the need to maintain deliveries of tuna to American Samoa canneries.

9. To improve the statistical base for better stock assessments and for making better decisions to conserve and manage highly migratory fish resources throughout their range in the Pacific Ocean.
10. To promote international/regional management of highly migratory species throughout their range as long as domestic fishery benefits under this plan are enhanced or maintained.
11. To conserve billfish and associated species in the FCZ to the extent possible while international agreements are being developed to conserve and manage these species through out their range along with the tunas.

4.3 Relationship Between Objectives

The Council recognizes that several of these objectives are mutually exclusive to some degree. To provide the maximum potential for the growth of domestic fisheries for pelagic species, for example, would seemingly require prohibition of foreign longline fishing for tuna from the FCZ around the populated islands in order to eliminate the potential for interception of the management unit species by foreign tuna fishing gear in the FCZ. This would, however, result in an unacceptable degree of interference with foreign fishing for tuna in the FCZ, could possibly affect the willingness of foreign longliners to continue deliveries of tuna to American Samoa canneries, and could result in a further curtailment of the flow of foreign catch data to the U.S. On the other hand, if minimal controls on foreign fishing for tuna were established, the potential for successful domestic fisheries and increased catches of the management unit species would decline, while the risk of gear conflicts would increase. The measures proposed in the FMP attempt to strike a reasonable balance between these objectives to the extent that they conflict with each other. The FMP proposes to prohibit foreign longline fishing in only about 25% of the FCZ of the Western Pacific Region (see Figure 3.1; p. 3-2). Moreover, the FMP would not limit the activities of foreign pole-and-line and purse seine tuna vessels at this time anywhere in the FCZ.

Objectives 1-5 reflect the Council's view that transfers of catch of billfish and associated species from foreign longliners to domestic vessels will generate increases in the economic and social values of the domestic fisheries for these species. Domestic fishermen have the capability and desire to harvest a larger number of billfish, mahimahi, wahoo and oceanic sharks than are now taken. Domestic recreational and commercial fisheries for the management unit species and tuna have expanded in recent years, and further expansion is likely in the future. Newer domestic longline vessels have longer range and better equipment to catch and maintain fish at sea in a high quality condition. The increase in the overall level of recreational fishing effort, and in the number of tournaments and catches of billfish in tournaments, attests to the rapidly growing importance and value of the recreational fishery. The social value of the domestic fisheries for the management unit species by far exceeds the ex-vessel value of the catch. The PMP does not provide assurance of adequate protection for domestic fishery interests and will not promote higher values from

the domestic fisheries in the long run. Under the PMP, foreign longline vessels can operate throughout the FCZ with limits only on the retention of billfish and associated species, not on hooking or killing of fish. The majority of billfish, mahimahi, and ono released by longliners would probably not be available to domestic vessels, since released fish, more frequently than not, are dead or moribund upon release. Also under the PMP, foreign fishing vessels can set longlines anywhere in the FCZ, with possible gear conflicts or with the result of discouraging domestic fishing in an area to avoid gear entanglement. Domestic fishermen generally avoid fishing in areas where foreign longline gear has been set because they expect low catch rates in such areas. Thus, the PMP does not assure a high probability of increased domestic catches and subsequent enhancement of domestic fishery values. The FMP is intended to redress this situation.

Objectives 6 and 11 reflect the Council's concern that the FMP should result in a wiser use of the fish resources in the FCZ compared to the situation prevailing under the PMP. First, elimination of the PMP's non-retention approach is essential in order to avoid waste. Where fish are taken, they should be retained and used unless there's a good probability of their survival upon release. The PMP can result in substantial waste of fish. Second, while not much can be done in the FCZ alone to control fishing mortality to improve or maintain healthy stocks of the management unit species throughout their assumed range, relocation of foreign fishing vessels away from areas of high blue marlin catches to areas of lower incidental catches may be beneficial to blue marlin stocks. The catch rate for blue marlin on foreign longline gear is nearly twice as high in the FCZ of the main Hawaiian islands compared to the FCZ of the NWHI. The catch rate for blue marlin on foreign longline gear is significantly higher in the FCZ of Guam and American Samoa than it is in the FCZ off the Hawaiian islands (Table 6.5). The FMP can signal foreign interests about the Council's and the U.S. Government's concerns about the health of billfish stocks; and so far as the FCZ is concerned, the FMP may eventually result in some decreases in blue marlin mortality since there are data which show that this species spawns in the waters near Hawaii and Guam which would be closed to foreign longline fishing if the FMP is adopted.

Objective 7 is intended to assure that U.S. fishermen will not suffer gear damage or losses as they fish in new areas. This is not assured by the PMP. While there has not yet been any legal foreign longlining in the FCZ under the terms of the PMP, foreign vessels have continued to obtain fishing permits and could enter all parts of the FCZ under the rules established by the PMP. As of June, ninety two foreign longline vessels have applied for permits to fish in the FCZ in 1986. This demonstrates a continuing interest of foreign longline vessels to fish in the FCZ, and fishing by these vessels in non-retention zones established by the PMP would result in a waste of the management unit species. A foreign longline set may be 50 or 60 miles long, and even a small number of longlines can cover and effectively foreclose domestic fishing in large areas of fishing grounds. The Council believes action is needed to provide certainty that foreign-domestic gear conflicts will not occur.

Objectives 8, 9, and 10 recognize the international concerns related to management of tuna, billfish and other highly migratory species. First, the Council notes that foreign vessels have a conditional right to pursue tuna in

the FCZ under the MFCMA. The PMP, however, is having the effect of keeping foreign longline vessels out of the FCZ entirely. The Council believes action is necessary to provide a reasonable opportunity for foreign vessels to fish for tuna in the FCZ with less red tape and less cost. The Council believes some relocation of foreign effort to different parts of the FCZ is preferable from a tuna policy standpoint to a de facto full closure of the entire FCZ of the Western Pacific Region to foreign longline fishing. Second, the Council recognizes the importance of continuing foreign longliners' tuna deliveries to American Samoa. The PMP apparently is viewed by some American Samoa-based longliners as being too difficult to comply with. Liberalized access to the FCZ around American Samoa and especially in the FCZ of U.S. Pacific island possessions may benefit these fishing interests considerably. Third, international cooperation is necessary for effective protection against overfishing of migratory pelagic species throughout their range. The de facto closure of the entire FCZ of the Western Pacific Region to foreign longline tuna vessels under the PMP does not provide a backdrop which is highly conducive to such agreements. The Council's view is that action under a FMP to give foreign vessels greater fishing opportunities in the FCZ for tuna and the management unit species will be more effective in advancing international negotiations between the U.S. and other nations than under the prevailing circumstances of the PMP. Meanwhile, by allowing more freedom for foreign fishing for tuna, a FMP can once again promote the flow of data for stock assessments, for better determination of the species distribution and seasonal migration patterns, and other analyses needed for improved management of highly migratory fish.

The Council also is concerned with the potential costs of administration and enforcement of the management system ultimately chosen. The Council notes the immense size of the FCZ in the central and western Pacific and the limited NMFS and Coast Guard resources available for enforcement. The PMP to date has not generated any enlarged enforcement or administrative cost requirements because there has not been any legal foreign longline fishing in the FCZ of the Western Pacific Region since the PMP became effective in 1980. Foreign permit processing and data collection activities in the NMFS are in place. Routine Coast Guard surveillance flights have occurred with no significant deviation and with no additional costs due to PMP requirements. The Council must point out, however, that the PMP would be unenforceable with current resources if foreign longline vessels with secured permits were to enter the FCZ even in fairly modest numbers. The Council believes that a more cost-effective approach must and can be established under the FMP. Enforcement activities could be targeted to specific areas of the FCZ for the most efficient deployment of available resources. The Council's proposed program for the management unit species should pose less need for increased enforcement budgets and achieve greater enforcement coverage under current budgets as compared to the PMP.

In conclusion, the Council has adopted a set of objectives which are consistent with the Council's management goals, with the policies and purposes of the MFCMA, and with established U.S. policy regarding highly migratory species of tuna. The listed objectives reflect the Council's view that the FMP can enhance domestic fishery values stemming from catches of the management unit species and can affect needed changes to correct the weaknesses of the PMP especially regarding its unintended contradiction of U.S. tuna policy.

4.4 Framework for Consideration of the FMP

4.4.1 Effects of the PMP

As emphasized previously, the PMP is, and was intended to be, a means to control foreign longlining in the FCZ until a FMP developed by the Council could be put in place. It was originally anticipated that the PMP would be a relatively short-lived and simple response to the immediate problem of managing the harvests of the management unit species by foreign longline vessels in the FCZ. The very first approach considered by the NMFS in developing the PMP was a series of area closures to foreign longline fishing to eliminate the risk of gear conflicts in waters heavily used by domestic fishermen. This simple approach was rejected because of Federal government's concerns over prevailing U.S. tuna policies. Instead of being simple, the PMP strategy turned out to be a complex set of quotas, non-retention zones, advance notification by foreign vessels of intentions to enter the FCZ to fish, and other complicated provisions (Section 5.2).

Unwittingly, the effect of the PMP has been just the opposite from the intended outcome. There has been no documented legal foreign longlining in the FCZ since April 1980 when the PMP went into effect. In 1980 and 1981, large numbers of longlining permits were obtained by foreign nations, but none were actually used. For all practical purposes, foreign longliners have effectively been shut out of the entire FCZ. This effect is neither necessary nor desirable. While this situation theoretically maximizes the gains to domestic fishermen who fish in the FCZ for pelagic species, it also maximizes the disruption of historical foreign longline fishing patterns for tuna in the FCZ. The Coast Guard and the NMFS still must make random flights throughout the FCZ to check for illegal entry. There has been no willful curtailment of foreign longliners' tuna deliveries to American Samoa canneries, nor of foreign longliners' port calls in Honolulu and Maui to obtain fuel, equipment, and supplies. These activities still continue today. However, there is no flow of data on foreign fishing in the FCZ, and foreign data on fishing elsewhere in the Pacific has ceased to be exchanged. The Council has had several informal discussions with Japanese and Korean tuna federation representatives concerning voluntary abstentions from certain areas of the FCZ, but no formal negotiations to develop bilateral agreements for the management of fishing for billfish, tuna, and other migratory species in the central and western Pacific have been successfully achieved to date. Although the U.S. is presently involved in negotiations with sixteen Pacific island nations regarding access of U.S. purse seiners to fish for tuna in the 200 mile zones of those nations, these negotiations are limited to tuna access and do not concern themselves with the management unit species, at least not yet.

This is not to say the PMP has not resulted in some beneficial effects. Domestic catches of billfish, mahimahi, and ono have increased since the PMP went into effect in April 1980. Foreign longline vessels

have abstained from fishing in the FCZ since that date. However, there is no assurance foreign vessels will continue to avoid fishing in the areas of the FCZ most important to domestic interests.

In short, the PMP may, in theory, provide a reasonable opportunity for foreign longline fishing for tuna in the FCZ, but the conditions associated with that opportunity - permits, quotas, non-retention, observers, reporting, and check-in and check-out provisions - are such that legal foreign longline fishing is not occurring. The Council's FMP should achieve a more balanced and better outcome for all participants.

4.4.2 Geographic Context

The Council's present area of jurisdiction is the FCZ around Hawaii (648,000 square miles), American Samoa (75,000 square miles), Guam (60,000 square miles) and U.S. Possessions (476,000 square miles). However, the Council's immediate area of jurisdiction cannot be looked at in isolation. The following points are important to keep in mind:

1. The PMP established controls over foreign longline fishing for billfish, mahimahi, wahoo, and oceanic sharks for the FCZ off the U.S. west coast as well as for the FCZ of the Western Pacific Region including the Commonwealth of the Northern Mariana Islands (CNMI). Since Council members have not yet been appointed from the CNMI, the FMP, however, will only have an immediate, direct effect around Hawaii, American Samoa, Guam, and the U.S. Possessions. Therefore, if a degree of regional consistency is to be eventually achieved, amendments to the FMP will be needed for the CNMI. Area closures to foreign longline fishing vessels in the FCZ of the CNMI or, perhaps, other measures, remain to be negotiated.
2. Foreign fishing vessels operate throughout the Pacific (63,800,000 square miles). Total annual catch of billfish in the Pacific by foreign longliners averaged more than 56,000 metric tons (MT) during 1973-1977; the total longliners' annual tuna catch was more than 245,000 MT. during this period. Only about 1.3% of the billfish and about 2.2% of the Pacific Ocean tuna were taken in the U.S. FCZ of the Western Pacific Region, including U.S. Possessions (Palmyra, Kingman, Wake, Jarvis, Johnston, Howland-Baker) and the Commonwealth of the Northern Mariana Islands (CNMI). At the same time, the average annual tuna catch by foreign baitboats in the Pacific was about 553,700 MT; less than 2% of that amount was taken in the FCZ of the Western Pacific Region. Catches of mahimahi, wahoo and sharks are not documented.

3. Stocks of billfish and associated species and tuna range throughout the Pacific. As a result, the extent to which their harvests are only controlled in parts of the FCZ will not have a meaningful effect on overall stock sizes. At the same time, there is not much apparent difference in the annual foreign longline catch rates within and outside of the FCZ for many species of tuna. Billfish catch rates can vary considerably, however. Thus, to the extent foreign longlining might be allowed in only certain parts of the FCZ, vessels could catch equal amounts of tuna with equal value in other parts of the FCZ or beyond the FCZ with current levels of effort, but might reduce their catch of billfish and other non-tuna species which are important to domestic fishing interests in the island areas served by the Council.
4. Except for some Hawaii-based longliners, most U.S. vessels in the Council's region fish for billfish and associated species almost exclusively within the FCZ. They are either not of a size capable of ranging vast distances, or they prefer to stay within striking range of home islands, or they are unable to find crew members willing to spend time at sea for long periods. Unlike far-ranging foreign vessels which fish mostly for tuna, domestic vessels, are almost totally dependent on the FCZ for their catches of the management unit species and tuna.

The Council has attempted to maintain a regional and, to a certain extent, an ocean-wide perspective in this plan.

4.4.3 Legal Context

The Magnuson Act establishes the authority of the U.S. to exercise exclusive management control over foreign taking of billfish and other non-tuna migratory fish in the FCZ. Foreign longliners, though primarily pursuing highly migratory species of tuna (which are not subject to U.S. authority), nonetheless catch large numbers of blue and striped marlin, swordfish, spearfish and other species in the management unit. Mahimahi, wahoo, and oceanic sharks also are taken, although the amount is unknown because most foreign longliners do not log the catch of these species. Foreign longliners do catch "fish" as defined in the Magnuson Act and their activities in the FCZ are thus subject to U.S. authority. This was established as a legal fact by the NMFS in preparing and implementing the PMP.

However, the degree of control which can be exercised over foreign longline fishing is a judgmental decision. The National Oceanic and Atmospheric Administration (NOAA) has provided legal guidance on how

to reach conclusions or judgments in these matters. In a legal opinion (Appendix C), NOAA concluded that:

A billfish management plan may contain management measures which affect foreign longline fishing for tuna in the FCZ, including area closures and season or gear restrictions, if the measures will (1) provide a reasonable opportunity for foreign longline vessels to fish for tuna in the FCZ and (2) impose the least burden on such vessels that will achieve conservation and management of the billfish covered by the plan...Regulation of the foreign longline take of billfish must be carried out so that it does not constitute the exercise of exclusive jurisdiction over tuna fishing.

It can be inferred from the legal opinion that control over foreign longline fishing for tuna was equated with "exclusive jurisdiction over tuna fishing". That is, the opinion implies that management measures cannot be so restrictive that longlining (i.e., tuna fishing) is prohibited in any of the FCZ areas covered by the plan. This reflects the fact that the opinion was prepared in response to questions raised by the Atlantic and Gulf of Mexico Regional Fishery Management Councils. Foreign longlining is the only form of foreign fishing for tuna in the FCZ of those areas. Therefore, control over foreign longline fishing in the U.S. FCZ of these two areas would in fact be tantamount to control over foreign fishing for tuna.

In the U.S. FCZ of the central and western Pacific Ocean, however, foreign pole-and-line (baitboat) vessels can be very active and in some years they have caught twice as much tuna as the foreign longliners. Even with the price differentials for skipjack tuna considered, the baitboats' catches (1973-1977 average) almost equalled the longliners' catches (1973-1977 average) in the FCZ in total value. Therefore, in the Council's view, even an absolute prohibition of foreign longlining in the Western Pacific FCZ would not constitute "exclusive jurisdiction over tuna fishing" since foreign pole-and-line fishing for tuna would not be affected beyond 12 miles from shore from any American flag islands in the central and western Pacific.

During recent years, the Council has also heard reports of increased purse seine and drift-gillnet fishing in the western and central Pacific in the vicinity of the U.S. FCZ. As a result, the Council requested guidance on the legal limits of regulating foreign gillnet and purse seine fishing in the U.S. FCZ. In September 1983, the General Counsel of the Southwest Region of the National Oceanic and Atmospheric Administration provided guidance (Appendix C) to the Council on this issue:

The catching, taking, or harvesting of any fish other than tuna, or the use of any fishing gear which can reasonably be expected to catch, take, or harvest any fish other than tuna is fishing under the Magnuson Act... The Magnuson Act does not distinguish

between direct and incidental catches in defining what constitutes fishing. Therefore, fish, other than tuna, caught by gill-nets and purse seines are covered by the Magnuson Act, and the use of these gears is also covered if they can reasonably be expected to catch fish other than tuna... the United States Government has consistently taken the position that both tuna longliners and tuna gillnetters can reasonably be expected to catch fish other than tuna, and therefore, are required to obtain a permit... Seizures of both longliners and gillnetters have been made to enforce this position... Likewise, if the United States concludes that purse seiners in the FCZ can reasonably be expected to catch fish other than tuna, foreign purse seine vessels would be fishing in the FCZ in violation of the Act unless they had a permit from the United States... Once Federal management jurisdiction is established or asserted, the content of management regulations must satisfy the Act and other applicable law. In the case of foreign fishing involving tuna, this means that the balancing considerations in the Agency's (NOAA's) legal opinion of 1979 on longlining and billfish are relevant. Although the 1979 opinion addressed longliners and billfish exclusively, the same considerations should apply in dealing with other gear types which take both tuna and non-tuna species (emphasis supplied).

On June 6, 1985, the Coast Guard boarded a Japanese pole-and-line vessel which had retained 107 mahimahi, 3 wahoo (ono) and 3 bags of squid caught inside the FCZ off Midway and Kure Island. This vessel did not have a fishing permit. However, seizure of this vessel was not authorized. Instead, this vessel's non-tuna catch was turned over to the NMFS and an "Offense Investigation Report" was forwarded to the NOAA General Counsel's office for resolution. Subsequently, the Coast Guard worked with the State Department to clarify the U.S. Government's enforcement posture vis-a-vis foreign pole-and-line tuna vessels. Eventually, a policy decision was reached that foreign pole-and-line tuna vessels may only retain tuna, although the PMP is totally silent on this matter. If pole-and-line tuna vessels operating in the U.S. FCZ are retaining non-tuna species, then seizure of all non-tuna is now authorized. If foreign pole-and-line tuna vessels are previous offenders or if the amount of non-tuna is unusually large, then additional sanctions may be imposed. Also, NOAA Office of General Counsel of the Southwest Region has recently opined that foreign purse seine tuna vessels cannot retain non-tuna species which they catch in the U.S. FCZ (Appendix C). The PMP is also silent on this matter.

The Council is not proposing to prohibit foreign baitboat, purse seine, and longline vessels from fishing in the U.S. FCZ of the Western Pacific Region. Instead, the Council recommends that there be reasonable limits placed on foreign longline fishing in parts of the FCZ of the Western Pacific Region which are important to domestic fishermen. Under the Council's proposals, foreign fishing by pole-and-line and purse seine tuna vessels may be conducted at any time and place in the FCZ only subject to voluntary reporting of incidental catches of the management

unit species and voluntary placement of U.S. observers on board some of these vessels. In the Council's view, the proposals of this revised FMP provide a very reasonable opportunity for foreign fishing vessels to fish for tuna in the FCZ. They impose much slighter burdens on foreign longliners than under the PMP, and do not, in any reasonable way, constitute exercise of exclusive jurisdiction over tuna fishing.

Another side of the "legal framework" is the MFCMA mandate to achieve "optimum yield" (OY) from the fishery. The Act defines OY as the amount of fish "which will provide the greatest overall benefit to the Nation, with particular reference to food production and recreational opportunities" (Section 3(18)). Under the Act, domestic fishermen are to be given priority access to fish in the FCZ. There would be little apparent benefit to domestic fishermen if foreign longliners were granted access to areas of the FCZ which are now or may soon become important to U.S. fishermen. "Optimum utilization" is domestic utilization of the management unit species in parts of the FCZ. There is no net loss to foreign longliners if their activities in some areas of the FCZ are curtailed while they are given more liberalized access to other areas of the FCZ. The Council is proposing a geographic shift of historical foreign longlining patterns in the FCZ rather than a prohibition. Domestic fishermen would then have priority to fish for billfish and associated species in waters most important to them, consistent with the MFCMA mandate.

4.4.4 Inter-Fishery Aspects

The Council is aware of perceptions that this FMP could somehow be taken as a precedent by other nations to prohibit U.S. purse seine fishing for tuna in those nations' Exclusive Economic Zones (EEZ). The Council does not believe that this FMP constitutes a basis for such belief or action. Tuna fishing techniques which are known to be quite selective such as pole-and-line fishing, and fishing for tuna which is presumed to be fairly selective such as purse seining would be permitted throughout the FCZ subject only to voluntary reporting of incidental catches and voluntary observer coverage. Longline vessels would be subject to control only in certain areas of the FCZ to limit the large incidental take of billfish, mahimahi, and wahoo. Large parts of the FCZ of the Western Pacific Region (about 75%) would remain open with no limits on catch and effort by foreign longline vessels but they would be subject to permit and reporting requirements. However, the use of drift-gillnets to capture pelagic species would be prohibited in the FCZ for foreign fishermen because of this gear's great non-selectivity in the species composition of the catch of fish and possible interactions with marine mammals and sea turtles. The use of drift-gillnets by foreign vessels in the FCZ is presently prohibited as a matter of U.S. policy. The FMP would simply institutionalize this policy.

Foreign fisheries generate revenues in Hawaii, American Samoa, Guam and the CNMI. Local businesses supply foreign fishing vessels with fuel, foodstuffs, and recreational opportunities for the crews. Figures are not available on the net benefits derived from these services in each area. The FMP, however, is not expected to affect these activities in any way.

Although U.S. purse seiners are now supplying most of the frozen tuna delivered to the tuna canneries in American Samoa, foreign longline vessels' tuna deliveries to the canneries still remain important. Other than the relatively small rectangular closures proposed by this plan for the FCZ of American Samoa, the FMP would give foreign longliners unlimited access to the remaining areas of the FCZ around American Samoa. Tuna deliveries to the canneries by foreign longliners are not expected to be affected by this plan.

Nations claiming authority to exercise exclusive jurisdiction over tuna in their EEZs will do so regardless of the actions taken by the Federal Government on this plan. Pacific island nations are not seeking ways to justify their actions under their domestic laws. The risk that this plan will be "precedent-setting" and detrimental to U.S. tuna purse seiner interests is, therefore, essentially non-existent.

4.4.5 Enforcement and Administrative Feasibility

The capabilities of the NMFS and the U.S. Coast Guard to patrol and enforce fishery regulations in the vast ocean area of the U.S. FCZ of the Western Pacific Region (1.5 million square miles) are extremely limited. The U.S. Coast Guard in the Council's Region has two high endurance cutters, two buoy tenders, three patrol boats, three C-130 aircraft, and two helicopters available in Hawaii, and one buoy tender and one patrol boat to patrol Guam and the CNMI. Some of these ships and planes are subject to frequent redeployment to other areas (e.g., Alaska) to address serious fishery enforcement problems as they arise. Some of these platforms are also used for emergency search and rescue missions as well as for enforcing a variety of ocean laws (pollution control, maritime theft, smuggling, drugs) and for aids to navigating and merchant marine safety, among other services traditionally provided by the Coast Guard. The vast distances involved in FCZ fisheries make it highly unlikely that there could be a necessary at-sea capability to enforce the provisions of the PMP should foreign fishing for tuna arise in the future under the rules of the PMP.

This illuminates a major weakness of the PMP. Quotas and non-retention requirements for foreign fishing vessels are impossible to enforce without either a cadre of on-scene observers or a large increase in the number Coast Guard vessels to inspect foreign fishing vessels at sea. An observer program can be useful, but the large numbers of vessels that can potentially get involved in the fishery argue against a wide use

of observers especially given the shortage of trained observers presently available to the NMFS and the realities of Federal budgets. Even if only a small number of foreign longline fishing vessels entered the FCZ in different areas at approximately the same time, the surface enforcement capability of the Coast Guard would be insufficient to verify compliance with catch quotas or non-retention procedures under the PMP. This does not imply criticism of either NMFS or U.S. Coast Guard capabilities. It simply demonstrates the reality for the need to consider a simpler, more cost-effective enforcement plan.

A much simpler plan for enforcement purposes is especially critically needed now since the Coast Guard had to make a 50% cutback on all fishery patrols and to eliminate routine surface patrols in the FCZ of the Western Pacific Region by the Gramm-Rudman Balanced Budget Law unless there is a certainty of interception of known violators of fishing laws. The Coast Guard may be subject to even larger budget reductions in the future. This situation is both ironic and debilitating at a time when local fishermen are worried about foreign vessels illegally fishing in the FCZ waters of the Western Pacific Region.

While closures of ocean areas of the FCZ by the FMP do not remove the requirements for the Coast Guard to patrol these areas, the patrols could be conducted much cheaper mostly by aircraft instead of ships. Since U.S. Coast Guard aircraft normally carry NMFS enforcement agents as part of their surveillance patrols, the documentation of violations by foreign fishing vessels could easily be substantiated by aerial photographs taken of foreign fishing vessels in the act of fishing (as defined in the MFCMA). Such documentation of violations could be used in the civil penalty process.

Consideration of the Council's management alternatives in this plan involves evaluation of the relative simplicity and effectiveness of enforcement regimes which mandate the stretching of shrinking enforcement assets and budgets to meet a substantial challenge in the FCZ areas. The management option of area closures best utilizes the realities of the enforcement capabilities of the U.S. Coast Guard and the NMFS. Enforcement cost-effectiveness will be greatly improved under this FMP compared to essentially unenforceable provisions of the PMP presently in effect.

4.5 Achieving a Balanced Approach

The MFCMA establishes the basis for recognizing the priority of managing and developing domestic fisheries for pelagic species and the maintenance of U.S. policy on highly migratory species of tuna. The Council proposes to achieve a reasonable balance by giving priority to domestic fishing interests in areas where domestic vessels are active and on which they are or may soon be dependent. There would be unrestricted access to highly migratory species of tuna in all parts of the FCZ by gear types which are believed to be quite selective in taking tuna. The use of drift-gillnets in the FCZ would be prohibited

for foreign fishermen and tightly controlled for domestic fishermen because of the gear's effectiveness in taking a full and non-selective mix of pelagic species of fish, marine mammals, and sea turtles. There would be controlled access to tuna in some parts of the FCZ for longline gear which inevitably takes many management unit species, but liberalized access for foreign longliners to fish in the FCZ of U.S. Possessions and American Samoa. In the Council's view, the management approach proposed in this FMP achieves the required balance in that:

1. The plan increases the potential for enhancing the overall values of domestic recreational fisheries for the management unit species;
2. The plan promotes the growth of domestic commercial fisheries for pelagic species;
3. The plan provides a reasonable opportunity for foreign vessels to fish for tuna in the FCZ and to maintain their historical levels of tuna catches;
4. Foreign tuna fishery interests would not be subject to excessive and unnecessary controls;
5. The area closure approach is relatively simple and easier to enforce than the PMP because of a tighter geographical focus on area closures rather than the PMP's non-retention approach and quotas.

