ENVIRONMENTAL ASSESSMENT ON AMENDMENT 10 TO THE FISHERY MANAGEMENT PLAN FOR THE GULF OF ALASKA GROUNDFISH FISHERY

INTRODUCTION

The Fishery Management Plan (FMP) for the Gulf of Alaska Groundfish Fishery was adopted by the North Pacific Fishery Management Council (Council), approved and implemented by the Assistant Administrator for Fisheries of the National Oceanic and Atmospheric Administration (Assistant Administrator) pursuant to Sections 302-305 of the Magnuson Fishery Conservation and Management Act (Magnuson Act), and published in its entirety on April 21, 1978, (43 FR 17242). A final environmental impact statement was prepared for the FMP and is on file with the Environmental Protection Agency. The FMP has been amended eight times. A ninth amendment was approved by the Assistant Administrator and is awaiting final Secretarial Approval. The Council approved a tenth amendment during its February 1981 meeting. This amendment has been submitted for approval and implementation by the Assistant Administrator.

This Environmental Assessment is prepared pursuant to 49 CFR 1501.3 and 1508.9 and NOAA Directive 02-10, to determine whether an environmental impact statement must be prepared on the proposed action pursuant to Section 102(2)(C) of the National Environmental Policy Act.

DESCRIPTION OF AND NEED FOR THE PROPOSED ACTION

The proposed action is to amend the FMP as it pertains to the Eastern Regulatory Area in order to permit recovery of depressed stocks of Pacific ocean perch, resolve gear conflicts between foreign trawlers and domestic fishermen, and reduce the incidental catch of unallocated species by foreign trawlers. The proposed changes, together with an explanation of the specific need for each, are as follows:

1. For Pacific ocean perch in the Eastern Regulatory Area, reduce Acceptable Biological Catch (ABC) from 29,000 metric tons (mt) to 875 mt, reduce Optimum Yield (OY) from 14,400 mt to 875 mt, reduce Domestic Annual Harvest (DAH) from 1,315 mt to 500 mt, reduce Total Allowable Level of Foreign Fishing (TALFF) from 10,205 mt to 200 mt, and reduce reserve from 2,880 mt to 175 mt.

   Pacific ocean perch populations in the Gulf of Alaska have never recovered from the intense foreign fishing that began in 1962 and 1963. The catch peaked at 344,700 mt in 1965 but had declined to 46,600 mt by 1976 when the MFCMA was enacted and controls were placed on the fishery. Since that time the 1977, 1978, 1979 and 1980 foreign catches in the Gulf of Alaska were 20,229 mt, 8,171 mt, 9,367 mt, and 12,387 mt, respectively.

   The best indicator of the depressed condition of Pacific ocean perch populations in the Eastern Regulatory Area are the steadily declining catch per unit of effort (CPUE) rates.

Data provided by the Fisheries Agency of Japan to the Northwest and Alaska Fisheries Center indicates that CPUE in the Southeastern and Yakutat Districts of the Eastern Regulatory Area declined respectively from 4.16 mt/hr and 6.22 mt/hr in 1968 to 1.50 mt/hr and 0.53 mt/hr in 1978. Observer data from Japanese large stern trawlers reflect steadily declining CPUE from 1978 to present (Table 1).

Table 1. Pacific Ocean Perch Catch Per Unit of Effort, Japanese Large Stern Trawlers, 1978-1980

	Southeastern District		Yakutat District	
Year	mt/da	mt/hr	mt/da	mt/hr
1978	12.697	1.373	7.925	0.990
1979	9.160	0.822	5.020	0.744
1980	6.021	0.533	4.677	0.448

The resource is most probably even more seriously depressed than these figures indicate since improvements in equipment and technique have significantly increased the effectiveness of the fishing effort to the extent that, if stocks had remained constant, CPUE would be expected to increase.

The allocation of a small TALFF is intended to permit an incidental catch of Pacific ocean perch during foreign directed fisheries for other groundfish. This measure provides effective protection since a nation would be required to terminate fishing efforts in the Eastern Regulatory Area once TALFF is achieved.

The Reserve is 20% of the OY. By the time Amendment #10 becomes effective it is expected that allocations of Reserve to TALFF would have been made for 1981; therefore, the Reserves will be allocated to TALFF as soon as this amendment becomes effective.

Pacific ocean perch are potentially an important species in the future development of a domestic groundfish fishery in the eastern Gulf of Alaska; therefore, rebuilding of the currently depleted stocks is necessary in order to provide the incentive necessary for such development.

2. Close the Fisheries Conservation Zone from Dixon Entrance to 140°W longitude to all foreign fishing. Require foreign trawlers fishing between 140°W and 147°W longitude to use only pelagic trawls with recording net-sonde devices functioning properly. Permit foreign trawling between 140° and 147°W longitude between January 1 and December 31. Delete the areas closed to foreign trawling east of 140°W longitude in the FCZ.

This part of Amendment #10 is designed to reduce the incidental catch of unallocated species in the Eastern Regulatory Area and resolve gear conflicts between foreign trawlers and domestic fishermen.

The foreign trawl fishery has adversely affected the Pacific halibut resource more than other unallocated species. Table 2 shows that the numbers of halibut taken incidentally have been increasing, based on observer data.

Table 2. Estimated Incidental Catch of Halibut, 1978 and 1979.

	Southeastern District		Yakutat District		Entire Eastern Regulatory Area	
Year	number	mt	number	mt	number	mt
1978	5,165	45.23	18,902	201.32	24,067	246.55
1979	21,052	313.30	62,542	1,374.95	83,594	1,688.25
1978-79 Average	13,109	179.27	40,722	788.14	53,831	967.40

Although unallocated species must be returned to the sea, trawl mortality of halibut is assumed to be 100%, and, therefore, the incidental catch represents a direct loss to the domestic fishery. The 1978-79 average incidental halibut catch of 967.4 mt represents 24% of the approximately 4,000 mt domestic directed catch in the Eastern Regulatory Area. Applying 1979 prices, the ex-vessel value of this incidental catch is about $3,900,000.

In addition to the economic loss, the largely unpredictable incidental catch creates problems in the effective management of the halibut fishery.

Since halibut are rarely taken in pelagic trawls, incidental catch of halibut by foreign trawlers would be essentially eliminated with this proposed change. Protection of the halibut resource, which supports the most important domestic groundfish fishery in Alaska, is identified as a management objective in the FMP.

With respect to gear conflict, the Eastern Regulatory Area has a long history of gear conflicts between foreign and domestic fishermen. Initially, most reported conflicts involved Japanese longline vessels and, as a result, foreign longlining was prohibited east of 140°W longitude beginning in 1978. Since that time, reports of gear conflict and grounds preemption involving foreign trawl vessels have increased. Two incidents of gear conflict were reported to the National Marine Fisheries Service in the Eastern Regulatory Area in 1979 and nine in 1980. Signed affidavits provided to the Alaska Department of Fish and Game of gear conflict and grounds preemption indicate two incidents in 1978, four incidents in 1979, and nine incidents in 1980. Only one of these incidents appears to be a duplication. The Alaska Longline Fishermen's Association estimates that 1980 gear conflicts resulted in losses between $2,500 and $20,000 each. When the many unofficial complaints of grounds preemption are also considered, there is little doubt that the problem is increasing. The Alaska Longline Fishermen's

Association claims that the activity of foreign trawlers also affects longlining success for sablefish. Data from fishing logs indicate that a 42% decline in CPUE and a 12% reduction in average weight occurs after a grounds preemption conflict. Whether this effect is a result of actual catch or from disturbance of the fishing grounds is not clear.

The gear conflict/grounds preemption problem occurs primarily east of 140°W longitude; therefore, the proposed change will reduce the problem considerably. The three areas closed to foreign trawling in the FCZ east of 140°W will no longer be necessary.

ALTERNATIVES INCLUDING THE PROPOSED ALTERNATIVE

Alternative 1. Adopt Amendment 10. This is the proposed alternative and the preferred alternative. This alternative is preferred because it would effectively respond to the problems described in the statement of need that led to the formulation of the amendment without placing unreasonable restrictions on existing fisheries.

Alternative 2. Adopt only one of the two changes proposed in Amendment 10. The two proposed changes previously described are independent of one another and can be considered independently on their own merits. Thus, the Assistant Administrator could approve one change and disapprove the other. This alternative would necessarily fail to address at least one of the problems previously described and is therefore considered unacceptable.

Alternative 3. Modify one or both of the proposed changes. The Council considered additional options to each of the two changes. These additional options are as follows:

a. Pacific ocean perch

(1) No TALFF. This alternative would, in effect, establish Pacific ocean perch as an unallocated species in the Eastern Regulatory Area. Pacific ocean perch taken incidentally in the foreign trawl fishery would be required to be returned to sea. However, since mortality would be essentially total and since no incentive would exist to avoid the incidental harvest of Pacific ocean perch, no benefit to the resource would result. This option is therefore considered unacceptable.

(2) TALFF larger than 200 mt. The best scientific information indicates that the present status of Pacific ocean perch requires stringent limitations on their harvest. Since the intention is to permit the foreign harvest of Pacific ocean perch only as bi-catch, this option was considered less acceptable than the proposed 200 mt TALFF.

b. Restrictions on foreign trawl fisheries

(1) Prohibit foreign trawling in the entire Eastern Regulatory Area. With respect to the gear conflict issue, this option would be

unnecessarily restrictive since gear conflicts occur almost entirely east of 140°W longitude. With respect to the incidental catch of halibut, this option is unnecessarily restrictive since groundfish can be harvested with pelagic trawls which rarely take halibut. Also, this option would require consideration of a compensatory upward adjustment of OY in the Central and Western Regulatory Areas for certain species. This option is therefore considered unacceptable.

(2) Prohibit foreign trawling in the Southeastern Management District. The Southeastern Management District extends westward to 137°W longitude and southward to 54°30'N latitude. Gear conflicts occur outside of the area, in particular in the Fairweather Grounds where much of the domestic sablefish fishery occurs. Also, since foreign longlining is currently prohibited east of 140°W longitude, regulation and enforcement is simplified by using a common eastern limit for all foreign fishing. This option is therefore considered unacceptable.

(3) Prohibit foreign trawling in the Eastern Regulatory Area from June 1 to November 30 and require pelagic trawls between December 1 and May 31. While this option would provide adequate protection for halibut, domestic longliners have stated their intention to fish for sablefish, Pacific cod, rockfish and flatfish year-round. As a result, gear conflicts and/or grounds preemption would be expected to occur during the period that foreign trawling was permitted. This option is therefore considered unacceptable.

(4) Develop improved communications between foreign trawlers and domestic fishermen in order to resolve gear conflict problems. While the Council endorses improved communications and has included with this amendment a proposed communications system to be appended to the FMP, firmer action is appropriate at this time. This option is therefore considered unacceptable.

Alternative 4. Reject the proposed amendment. This alternative would fail to provide needed protection for declining populations of Pacific ocean perch, fail to reduce incidental catches of halibut, and fail to resolve the gear conflict issue. This alternative is therefore considered unacceptable.

ENVIRONMENTAL IMPACT OF THE PROPOSED ACTION AND ALTERNATIVES

Impacts on the Biological and Physical Environment

With respect to Pacific Ocean perch, reduced levels of harvest will permit rebuilding of currently depressed populations and, hence, a beneficial impact on the biological environment. The 500 mt DAH will not significantly affect the rate of recovery and will permit the initiation of an experimental domestic fishery. Likewise, the 175 mt reserve, should it be allocated, and the 200 mt TALFF will not significantly affect the rate of recovery. The small TALFF is intended as a by-catch and is more effective in curtailing by-catch than is a zero TALFF since once the small TALFF is exceeded by a

nation, that nation must cease fishing, whereas, with a zero TALFF, Pacific Ocean perch would merely be returned to the sea despite the high mortality involved. Maintaining the current levels would reduce the rate of recovery.

The prohibition of foreign trawling east of 140°W longitude and the requirement for foreign trawlers to use only pelagic trawl gear between 140°W and 147°W longitude will eliminate the high incidental catch of Pacific halibut in foreign bottom trawl operations. In the Eastern Regulatory Area during 1978 and 1979, the amount of halibut caught incidentally by foreign trawlers numbered 24,607 and 83,594 fish. Since the trawl mortality of halibut is assumed to be 100 percent, the reduction in the incidental catch of halibut will have a favorable impact on the management of the resource by removing a largely unknown and unspecified harvest. The area closure and gear restriction proposed by Amendment 10 will also mitigate the impact of bottom trawling on other benthic organisms, primarily king and Tanner crab. Although all crabs caught by foreign trawlers are required to be released, a 70 percent mortality of those returned to the sea is assumed. Again, a reduction in the incidental catch of king and Tanner crab will have a beneficial impact on the management of these resources and on the resources themselves.

Prohibition of foreign trawling east of 140°W longitude will eliminate foreign interception of salmon in this area. The incidental catch of salmon that would occur in a year-round pelagic trawl fishery between 140°W and 147°W longitude is largely unknown. Since salmon, primarily chinooks, are commonly caught by foreign trawlers fishing with bottom gear, the pelagic gear restriction may reduce the incidental catch and mitigate the effect of the foreign trawl fishery on Alaskan chinook salmon stocks.

One adverse effect of foreign trawl operations on the environment results from the loss and discard of trawl mesh, lines, and plastic wrapping material at sea. In some areas these discards have been of sufficient magnitude to cause a problem for marine mammals and birds. Mortalities associated with entanglements of marine mammals, primarily fur seals and sea lions, in the open ocean cannot be identified; however, since these marine mammals do migrate through the Gulf of Alaska, it is possible that they may encounter lost gear. While fishing activity and accompanying gear loss and discharge in the Bering Sea probably have more adverse impacts on marine mammals and birds than such activities in the Gulf of Alaska, the prohibition of foreign trawling in the Gulf of Alaska east of 140°W longitude would likely reduce such impacts if they do occur. Alternatively, extending the foreign trawl fishery to a y ear-round fishery between 140°W and 147°W longitude could conceivably increase the adverse impacts of fishing operations on marine mammals and birds in this area.

Prohibiting foreign trawling east of 140°W longitude will reduce gear conflicts and grounds preemption markedly. Since those species targeted upon by foreign trawlers consists of stocks common to the entire Eastern Regulatory Area which move freely east and west of 140°W longitude, the entire OY for the Eastern Regulatory Area can be harvested west of 140°W longitude without overfishing those species whose OY is calculated for all of the Eastern Regulatory Area.

The closure and gear restriction will not affect the ability of foreign fishermen to catch the allocated TALFF of species other than sole and flounder, which are not generally taken with pelagic or "off bottom" gear.

Although flounders are not generally accessible to pelagic trawl fisheries, they can be taken by hook and line fisheries so the trawl restriction does not necessarily preclude attainment of OY nor of foreign fishermen catching the allocated TALFF. Some of the flounder TALFF is now taken in the foreign longline fisheries for sablefish and Pacific cod, especially the larger flounders such as Greenland turbot and arrowtooth flounder. Longlining for flounders and smaller flatfish has been a viable fishery in other parts of the world, including U.S. waters.

Domestic trawl fishermen, who can continue to use bottom trawls, may decide to expand their fishery if there is less foreign effort in the area.

Under existing regulations the area between 140°W and 147°W longitude is closed to all foreign trawling from January 1 to February 15 and November 1 to December 31; however, under the proposed regulations the area will be opened to foreign pelagic trawling year-round. For these reasons, no downward adjustment of OY or TALFF is deemed necessary. Scientists from NMFS Northwest and Alaska Fisheries Center feel that the groundfish stocks in this area would be able to withstand an increase in foreign fishing, at least for a few years, which could result from the closure of the Eastern Regulatory Area east of 140°W longitude. Any increase in fishing pressure on these stocks would have to be closely monitored and future adjustments in the groundfish OY's may be made if the year-round pelagic trawl fishery appears to be having an adverse affect on these resources. The option of closing the entire Eastern Regulatory Area to foreign fishing would not permit the achievement of OY for several species of no current interest to U.S. fishermen.

The effects of the proposed year-round pelagic trawl fishery between 140°W and 147°W longitude on salmon and marine mammals and birds is largely unknown; however, the opportunities for numerous beneficial impacts on other biological and physical elements of the environment would be eliminated if Amendment 10 were not approved and implemented.

Impacts on the Socioeconomic Environment

Rebuilding of Pacific Ocean perch populations to the point at which they can sustain a stable fishery could have a very favorable impact on future domestic groundfish fisheries. Besides sablefish and halibut, this is the only species which could support such a fishery in the eastern Gulf of Alaska. Pacific Ocean perch are long lived (30+ years) and have a low rate of natural mortality. These characteristics contribute to the maintenance of a very stable population and, therefore, with appropriate management measures, a stable fishery. In the event that a foreign nation exceeds the low TALFF proposed and is required to cease fishing in the Eastern Regulatory Area, that nation might experience adverse economic impacts. However, of the 162,000 mt 1979 foreign groundfish catch in the Gulf of Alaska, only 20,180 mt, or 12%, came from the Eastern Regulatory Area, indicating that this area is less important to the foreign fishing industry than are the Central and Western Regulatory Areas.

The requirement to use only pelagic trawls will virtually eliminate the incidental catches of halibut and crab in the Eastern Regulatory Area. The foreign bottom trawl fishery has adversely affected the halibut resource more than other unallocated species and the mortality of halibut caught in foreign

trawling operations is essentially total. The ex-vessel value of the halibut thus wasted averaged an estimated $3.9 million annually in 1978 and 1979. While some nations may consider pelagic trawls less effective than bottom trawls, some redress is provided since, whereas all trawling in the area between 140°W and 147°W longitude is now prohibited from January 1 to February 15 and from November 1 to December 31, the proposed amendment permits pelagic trawling year-round.

With respect to gear conflicts, gear loss, estimated by the Alaska Longline Fishermen's Association to be between $2,500 and $20,000 per incident, would be largely eliminated by the proposed amnedmnet. Grounds preemption, wherein domestic longliners elect not to risk gear loss by fishing otherwise productive areas where foreign trawlers are known to operate, would also be largely eliminated. Foreign trawlers would not be deprived of harvesting their TALFF since the area between 140°W and 147°W longitude would be open year-round to pelagic trawling and since stocks of targeted species move freely east and west of 140°W longitude.

These opportunities for beneficial impact on the socioeconomic environment would be eliminated if this amendment were not approved and implemented.

Effects on Endangered Species and on the Alaska Coastal Zone

None of the alternatives would constitute an action that may affect endangered or threatened species or their habitat within the meaning of the regulations implementing Section 7 of the Endangered Species Act of 1973. Thus, consultation procedures under Section 7 will not be necessary on the proposal and its alternatives.

The proposed action will be carried out in a manner that is consistent, to the maximum extent practicable, with the Alaska Coastal Management Program, in accordance with Section 307(c)(1) of the Coastal Zone Management Act of 1971 and its implementing regulation.

AGENCIES AND PERSONS CONSULTED

In the course of the preparation of this environmental assessment, the following persons and agencies were consulted:

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FINDING OF NO SIGNIFICANT ENVIRONMENTAL IMPACT

For the reasons discussed above, it is hereby determined that neither approval and implementation of Amendment 10 nor any of the reasonable alternatives to that action would significantly affect the quality of the human environment, and that the preparation of an environmental impact statement on these actions is not required by Section 102(2)(C) of the National Environmental Policy Act or its implementing regulations.

Assistant Administrator for Fisheries, NOAA Date

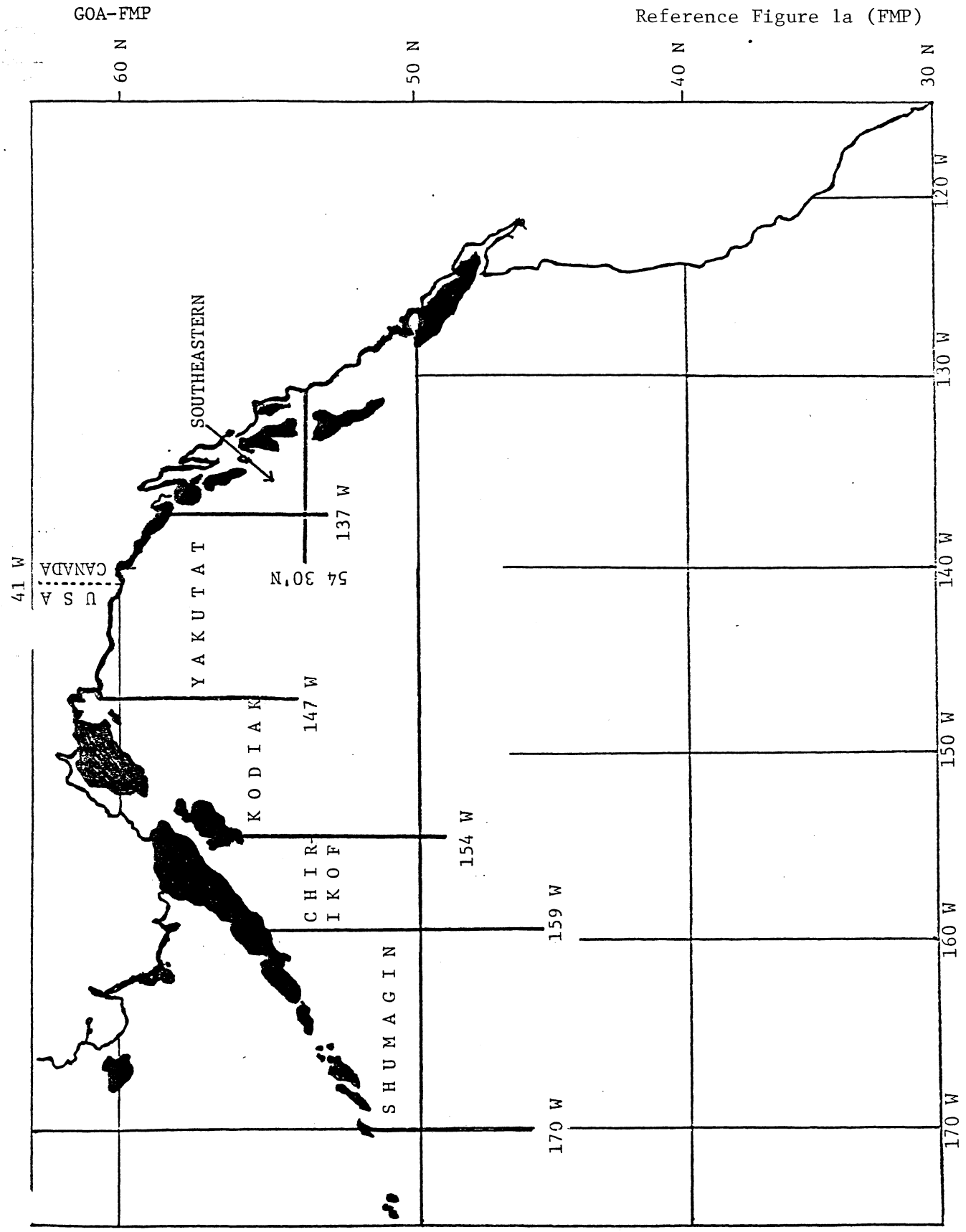

Figure 1a - - Regulatory Areas of the Gulf of Alaska (INPFC)