

DATE 12/6

TIME _____

AGENDA ITEM 0-5

ROLL CALL TALLY


	Yes	No
ALVERSON	<u>X</u>	<u>✓</u>
BLUM (or MERCHANT/PEDERSEN)	<u>✓</u>	<u>X</u>
COLLINSWORTH	<u>✓</u>	<u>X</u>
COTTER	<u>✓</u>	<u>X</u>
DYSON	<u>✓</u>	<u>X</u>
HEGGE	<u>X</u>	<u>✓</u>
LAUBER	<u>✓</u>	<u>X</u>
MACE (FISHER)	_____	<u>✓</u> <u>X</u>
<i>m</i> MITCHELL	<u>✓</u>	<u>X</u>
PENNOYER (or BROOKS)	<u>✓</u>	<u>X</u>
PEREYRA	<u>✓</u>	<u>X</u>

✓ MOTION Alt 2 + split after Aug 2 - Carried 8-3
 X amend to remove the split per 9-2

(m) - maker of motion
(2) second

MEMORANDUM

TO: Council, SSC, and AP Members

FROM: Clarence G. Pautzke 
Executive Director

DATE: November 26, 1990

SUBJECT: Halibut Management for Regulatory Area 4E

ACTION REQUIRED

Approve IPHC AREA 4E regulatory analysis for public review.

BACKGROUND

At their January/February 1990 meeting, the IPHC promulgated regulations to expand Regulatory Area 4E to include a portion of Bristol Bay which was previously part of the closed halibut savings area. This was approved by the U.S. Government and announced in the Federal Register on May 30, 1990. In this same notice, appeared an announcement of an emergency final interim rule, approved by the Secretary, which divided the expanded IPHC 4E Area into north and south sub-areas and established separate catch limits for each sub-area within 4E. This was done to carry forth the intent of the Council that the newly created Bristol Bay experimental fishery not interfere with the traditional Nelson Island fishery for which the original Area 4E was created. This action created a separate catch limit for the Bristol Bay waters of 30,000 pounds, with the remaining 4E catch limit (70,000 pounds) apportioned to the Nelson Island fisheries.

The regulations promulgated by the interim rule will expire on December 31, 1990, and, if the Council fails to take action on this issue, regulations governing Area 4E will revert to those in effect prior to the implementation of the interim rule. This would leave an expanded area 4E, inclusive of Bristol Bay waters, with an overall catch limit of 100,000 pounds. The result could be severe competition between skiff fishermen from the Nelson/Nunivak Islands and fishermen from Bristol Bay having larger boats better equipped for high production fishing. In September, the Council requested the IPHC to establish a separate regulatory area in Bristol Bay, independent of the original 4E Area around Nelson and Nunivak Islands, with its own quota for the 1991 fishing year (Item C-5 (a) in your notebooks). Commission staff responded that it was an allocative issue and should be resolved by the Council.

In his November 2 letter (item C-5(b)), Steve Pennoyer suggested that the Council consider the issue during the November 15 teleconference. The Council did so and requested staff to prepare an analysis for review in December. That analysis is under item C-5(c) and needs to be approved for public review. The final decision will be scheduled for January.

North Pacific Fishery Management Council

Don W. Collinsworth, Chairman
Clarence G. Pautzke, Executive Director

605 West 4th Avenue
Anchorage, Alaska 99501



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October 3, 1990

Donald McCaughran, Executive Director
International Pacific Halibut Commission
P.O. Box 9-5009
University Station
Seattle, Washington 98145-2009

Dear Don:

The North Pacific Fishery Management Council met last week and asked me to pass on to you and the Commission, the following recommendations on next year's halibut fisheries in Areas 4C and 4E.

For Area 4C, the Council requests that the Commission establish seasons concurrent with other fixed gear seasons in the area to encourage wider distribution of fishing effort. The 10,000-lb. trip limits for 1990 did not increase the local share of the catch as intended. Preliminary data indicate that local fishermen caught 188,000 lbs., just 34% of the 548,000 lb. total catch. This decline in local share from 1989 was attributed in part to concentration of fishing effort into 4C for lack of other longline opportunities. The Council hopes to avoid a recurrence in 1991 with this request for concurrent seasons.

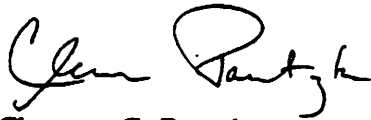
For Area 4E, the Council requests that the Commission establish a separate regulatory area in Bristol Bay, independent of the original 4E area around Nelson and Nunivak Island, with its own quota and season for 1991 if there's no conservation problems. You'll recall that last September, the Council forwarded to the Commission for action a proposal by the Bristol Bay Co-op for a small halibut fishery in Bristol Bay if there were no conservation problems. The proposal requested an area between Cape Newenham and Stroganoff Point, extending 20 miles offshore. Two openings were proposed: June 1-15 for 25,000 lbs. and August 1-15 for 25,000 lbs. The Council supported this proposal because it would benefit local communities.

In February, the Commission responded by extending Area 4E past Cape Newenham into Bristol Bay. NMFS then subdivided 4E into northern and southern areas with 70,000 and 30,000-lb. quotas, respectively. Without that division, the extension of 4E could have inadvertently created severe competition between skiff fishermen from Nelson and Nunivak Islands and fishermen from Bristol Bay having larger boats better equipped for high production fishing. Preliminary catch data indicate that local fishermen caught 25,000 lbs. of the 30,000 lb. quota in the southern area, while only 21,000 lbs. were taken from the 70,000 lbs. in the northern area. Local fishermen accounted for only 13,000 lbs. of the northern area catch.

Donald A. McCaughran
October 3, 1990
Page 2

Obviously there is considerable fishing power in Bristol Bay and northern communities are just now developing their fisheries. The Council would like to enhance the halibut fishery opportunities for local communities around Bristol Bay and in the Nelson-Nunivak Island areas, but not foster strong competition between the regions. Therefore, we request that the Commission establish separate areas and appropriate quotas if there are no conservation problems.

Sincerely,



Clarence G. Pautzke
Executive Director

cc: Council members



UNITED STATES DEPARTMENT OF COMMERCE AGENDA C-5(b)
National Oceanic and Atmospheric Administration DECEMBER 1990
National Marine Fisheries Service
P.O. Box 21688
Juneau, Alaska 99802-1688

November 2, 1990

Dr. Clarence G. Pautzke
Executive Director
North Pacific Fishery Management Council
P.O. Box 103136
Anchorage, Alaska 99510

Dear Clarence:

At its September meeting, the Council recommended that the International Pacific Halibut Commission divide Regulatory Area 4E and establish separate halibut quotas for the Bristol Bay and Nelson and Nunivak Islands fisheries. In a letter dated October 15, 1990, Commission Director Donald McCaughran affirmed that he would present the recommendation to the Commission for consideration, but advised that the Commission staff views this recommendation as allocative in nature and without biological justification.

As you know, the Commission may develop halibut regulations to promote conservation, but regulations having allocation as a primary purpose must be developed by the Council for implementation by the Secretary of Commerce. Consequently, if the Commission determines that the division of Area 4E cannot be justified as a conservation measure, the Commission will not be able to act upon the Council's recommendation. It is also possible that the Canadian Commissioners will fail to approve any halibut regulations for 1991 in protest over halibut bycatch in the groundfish fisheries off Alaska. In anticipation of either event, the Council may wish to develop its own Area 4E regulations for implementation by the Secretary.

We may wish to have the Council discuss this during the teleconference scheduled for November 15. We could prepare the necessary analysis and supporting documents for consideration at the December meeting. The Council could then send it out for public review with final approval and recommendation to the Secretary at the January meeting. This should put the regulations in place before the beginning of the 4E season.

Sincerely,


Steven Pennoyer
NMFS Alaska Regional Director



**DRAFT
ENVIRONMENTAL ASSESSMENT
AND
REGULATORY IMPACT REVIEW
OF A MANAGEMENT PROPOSAL FOR
THE HALIBUT FISHERY
OFF ALASKA**

Submitted by the North Pacific Fishery Management Council

**Prepared by
the Staff of the North Pacific Fishery
Management Council**

November 26, 1990

FIGURE 1. IPHC Regulatory Areas with Proposed Subdivision of Area 4E

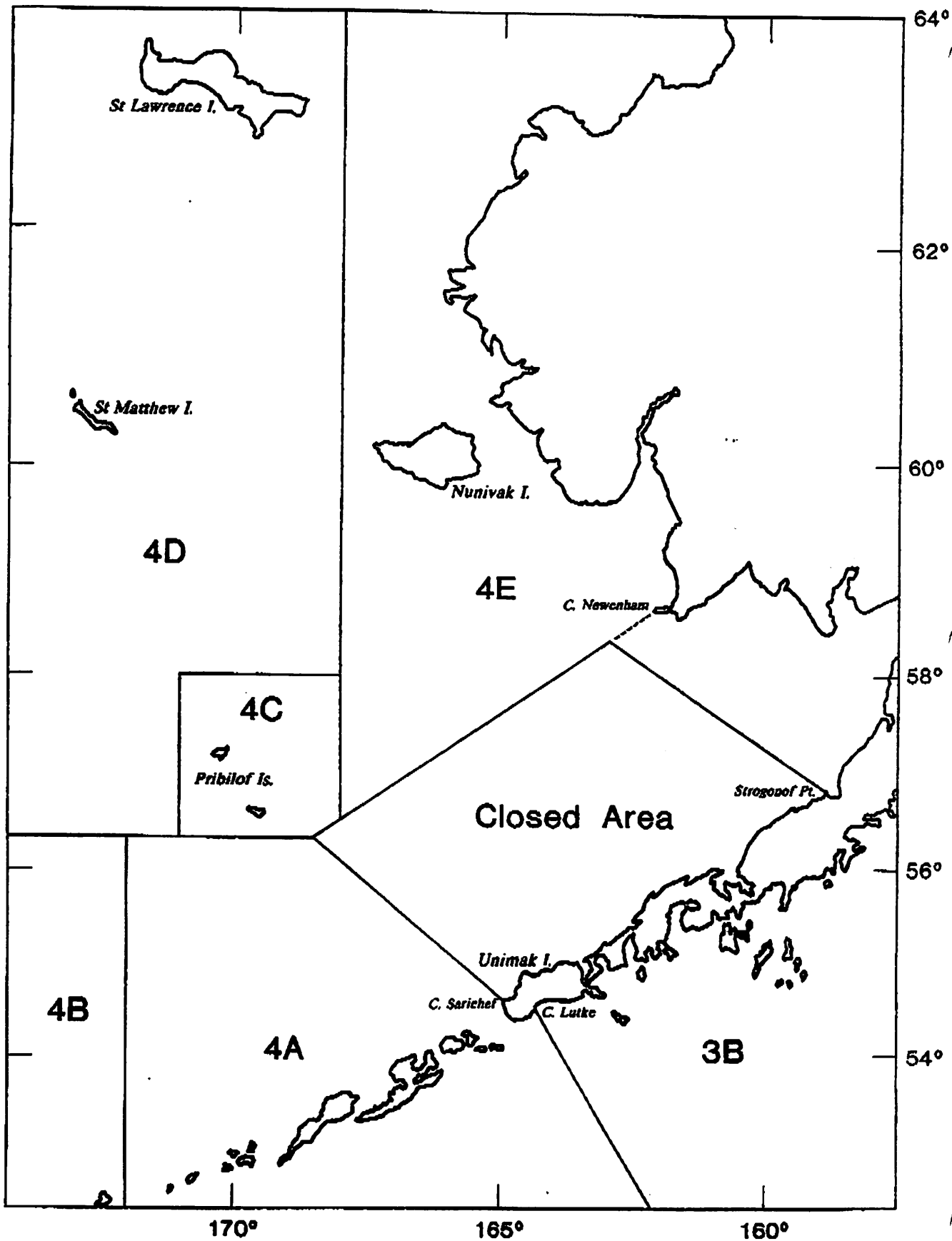


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DRAFT EA/RIR FOR REVISIONS TO AREA 4E HALIBUT REGULATIONS

1.0 INTRODUCTION

A Regulatory Amendment has been requested by the North Pacific Fishery Management Council (NPFMC) which would examine a possible subdivision of Regulatory Area 4E into north and south components with separate catch limits.

1.1 OVERVIEW OF THE NEED FOR ACTION AND THE ALTERNATIVES

Regulatory Area 4E was expanded to the southeast into Bristol Bay in 1990 to provide for a test commercial halibut fishery in an area that otherwise would have been closed to halibut fishing (55 F.R., 21876, May 30, 1990). This rule, promulgated by the International Pacific Halibut Commission (IPHC) represents a permanent redefinition of the Area 4E boundaries, unless superceded by subsequent actions. The IPHC, however, did not approve a division of the catch limit for Area 4E between the new Bristol Bay portion (south sub-area) and the original 4E Area around Nelson/Nunivak Islands (north sub-area).

Therefore, the Secretary determined that additional measures were necessary to protect the halibut resource in Regulatory Area 4E. Many Bristol Bay vessels expressed interest in participating in the newly expanded portion of Area 4E. With evidence suggesting potentially high fishing effort in the waters of Bristol Bay within Regulatory area 4E, there was concern that this effort would take an unduly large portion of the overall 100,000 pound catch limit for the entire 4E Regulatory Area. Council intent with regard to Area 4E was to avoid localized depletions of halibut and to maintain the Nelson Island fishery. In order to alleviate this potential problem, IPHC scientists recommended subdividing the 4E area into separate areas with separate quotas for Bristol Bay waters and the waters around Nelson Island. To accomplish this, the Secretary determined to establish a separate sub-area for Bristol Bay waters with a catch limit of 30,000 pounds. That area, shown in Figure 1 is defined as all waters south and east of a line from latitude 58 21'2" N., longitude 163

00'00" W. to Cape Newenham (latitude 58 30'00" N., longitude 162 10'25"). This final interim rule expires on December 31, 1990.

A Regulatory Amendment will be required to reinstate the subdivision of Area 4E and apportion the total 4E catch limit between the 2 sub-areas. The 4 alternatives being considered for this Regulatory Amendment are:

1. Status Quo - under the status quo option, the geographical subdivision of Area 4E would evaporate and the 100,000 pound catch limit would be available to be harvested anywhere in the 4E area, including the Bristol Bay waters (part of the now-expanded Area 4E).
2. A 70/30 split - under this option, 70% of the total catch limit would be apportioned to the Nelson Island waters (north sub-area) and 30% of the total to the Bristol Bay waters (south sub-area), with the geographical boundary between the 2 sub-areas remaining at the same coordinates (described above) established by the 1990 interim final rule.
3. A 50/50 split - under this option, the total catch limit for Area 4E would be divided equally between the 2 sub-areas with the same geographic subdivision established under the 1990 interim rule.
4. A 30/70 split - under this option, 30% of the total catch limit for Area 4E would be apportioned to the Nelson Island (north) sub-area and 70% to the Bristol Bay (south) sub-area with the same geographic subdivision as established under the 1990 interim rule.

Outside of additional Council action, the same IPHC regulations from the 1989 fishing year would be in effect concerning trip limits, vessel clearance requirements, and season openings. These include the following:

Trip limits - 6,000 pound trip limits all season.

Seasons - two days on/one day off openings starting June 1.

Clearance requirements - Fishermen who do not land their total annual catch at ports within Area 4E, must obtain clearance at Dutch Harbor or Akutan with empty holds, no earlier than 120 hours of the opening. The vessel must then clear again within 120 hours of the closing and before halibut is offloaded. Vessels cannot clear through Dutch Harbor or Akutan to fish in Area 4E, and then fish in Areas 4A, B, C, or D before going to 4E. If trip limits are in effect for a regulatory area, as they are all season in Area 4E, vessels cannot fish in any other area during the period if they fish in the area having a trip limit.

2.0 NATURE AND SOURCE OF THE PROBLEM

At its September, 1990 meeting, the Council expressed its desire to extend the existing regulations pertaining to Area 4E in order to maintain indefinitely a subdivision of Area 4E that creates a halibut fishery for the waters of Bristol Bay separate from the fishery in the remaining waters of Area 4E. In October, the Council requested the IPHC to establish these separate regulatory areas within 4E with a recommended 70/30 split between the north and south sub-areas. It is likely that this request will be denied on the basis that this is a wholly allocative request without a biological basis. Therefore, a Regulatory Amendment is required to accomplish the intended subdivision of Area 4E. The main intent of the proposed Regulatory Amendment is to maintain the current geographical subdivision of Area 4E, with 3 possible scenarios for apportioning the harvest between the 2 sub-areas. Upon review of this document, the Council will choose a preferred alternative and forward it to the Secretary for consideration.

As mentioned above, the problem being addressed by this proposed Amendment is that the expansion of Area 4E was approved by the IPHC without subsequent regulations that would divide the area and apportion the harvest between the 2 sub-areas. This was accomplished by an emergency interim rule, approved by the Secretary, which expires at the end of 1990. If no further action is taken regarding Area 4E, then regulations governing this area will revert to those in effect before the 1990 interim rule. This means that Area 4E would still consist of the expanded area (including Bristol Bay waters) that was permanently

created by IPHC regulations, without subdivisions.

Coincidentally, the total catch limit for the 1989 year was the same as for the 1990 year - 100,000 pounds. The 6,000 pound trip limit would still be in effect as would the season openings schedule and the vessel clearance requirements, these being unchanged by the 1990 interim rule. Although the season openings schedule and the total catch limit may be modified by future IPHC regulations, this analysis assumes that they will remain as stated. A reduction in the overall catch limit for the area may slightly alter the magnitude of the effects of any of the alternatives shown, but would not significantly affect the relative comparisons drawn between the alternatives. A possible season change - to make the openings concurrent with other Gulf of Alaska openings - might serve to reduce the amount of effort exerted by outside boats in Area 4E. The Council expressed no intent to examine potential changes in the geographical boundary line between the 2 sub-areas, therefore, this analysis addresses only the dividing line described in the 1990 interim rule.

The absence of further action will result in an enlarged Area 4E, including the waters of Bristol Bay, with a total catch limit of 100,000 pounds. This situation would not prevent expansion of the Bristol Bay fishery which, contrary to Council intent, could preclude the Nelson/Nunivak Island area fisheries.

3.0 DESCRIPTION OF THE ALTERNATIVES

3.1 Alternative 1: Status Quo

For purposes of this analysis, the status quo would be defined as the regulatory regime that was in effect prior to the emergency rule. Therefore, adoption of the status quo in this case would be synonymous with taking no action at all. As described above, these regulations would maintain the enlarged Area 4E, including the waters of Bristol Bay, with an overall catch limit of 100,000 pounds. This expanded area includes part of the previously closed area, specifically all waters of the Bering Sea north and east of the closed area (redefined in 50 CFR Part 301.8), east of longitude 168 00'00" W., and south of latitude 65 34'00". There

would be no subdivision of the area and the entire 100,000 pounds could be taken anywhere within the 4E Area.

3.2 Alternative 2: 70/30 split between north and south sub-areas

This alternative would establish the same regulations as were put into effect by the interim rule for the 1990 fishery. This alternative would establish a geographical subdivision of Area 4E designed to separate the Bristol Bay fishery from the rest of Area 4E with its own separate catch limit. This sub-area (the south sub-area) would consist of that portion of Area 4E which is south and east of a line from latitude 58 21'2" N., longitude 163 00'00" W., to Cape Newenham (latitude 58 30'00" N., longitude 162 10'25" W.). This sub-area would be closed when a catch limit of 30,000 pounds (13.6 metric tons) is taken. Conversely, the north subarea (the waters around Nelson Island) would consist of the remaining portion of Area 4E and would close when the catch limit of 70,000 pounds (31.7 metric tons) is taken. Under alternative 2 the trip limits, season openings, and clearance requirements would remain the same as described under alternative 1.

3.3 Alternative 3: 50/50 split between north and south sub-areas

Alternative 3 would establish the same geographical subdivision of Area 4E as described under alternative 2. Under this alternative, each sub-area would be apportioned an equal amount of the total Area 4E catch limit (assumed for these purposes to be 100,000 pounds) and each sub-area would close when 50,000 pounds of halibut are taken. Trip limits, season openings, and vessel clearance requirements would be the same as described under alternative 1.

3.4 Alternative 4: 30/70 split between north and south sub-areas.

Under alternative 4, the same geographical subdivision would be established as described above. Under this alternative, the north sub-area (consisting of the waters around the Nelson Island area) would receive 30,000 pounds of the total 100,000 pound apportionment while the south sub-area (Bristol Bay) would receive 70,000 pounds. This apportionment scenario represents the reciprocal of that instituted by the 1990 interim

rule. Either sub-area would close upon attainment of its portion of the catch limit.

4.0 ANALYSIS OF THE ALTERNATIVES

Table 1 below presents a history of halibut landings from Area 4E for 1984 through 1989, the years prior to the inclusion of Bristol Bay waters in the area.

TABLE 1. Halibut landings from Area 4E, 1984-1989 (lbs. dressed weight)

<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
35,000	36,000	43,000	90,000	9,000	13,000

Average landings for the 6 year period = 37,666 pounds

While it is useful to look at a history of Area 4E landings, this analysis is concerned with the effects of a possible subdivision of the 4E area with separate catch limits for each sub-area. In order to examine the potential effects of any of the proposed subdivisions, it is necessary to look at the distribution of halibut landings which occurred during the 1990 fishing year. This is the first and only year in which the 4E Area included the Bristol Bay experimental fishery; therefore, the analysis of alternatives relies on this data which is shown below in Table 2.

TABLE 2. Preliminary 1990 Area 4E Halibut Landings (IPHC data)

<u>4E (north)</u>	<u>28 Local Boats</u>	<u>Nelson Island</u> - 3,413 pounds
		<u>McKaryuk</u> - 7,730 pounds
		Subtotal - 11,143 pounds
	4 Outside Boats (7 trips)	- <u>23,811 pounds</u>
	Total	- 34,954 pounds
<hr/>		
4E (south)	June 1-3: 89 Boats	- 20,320 pounds
	June 7-8: 21 Boats	- <u>4,740 pounds</u>
	Total	- 25,060 pounds

As shown by the landings data in Table 2, the north sub-area of 4E harvested 34,954 pounds, or 50%, of the total allocation of 70,000 pounds for that sub-area. This harvest is very close to the 6 year historical average of 37,666 pounds from the original Area 4E. Local boats took about one-third of that total harvest, or 16% of the total 70,000 pound allocation. In this context, the designation 'local boat' refers to a boat that lands all of its annual halibut catch in that Regulatory Area.

The Bristol Bay fishery in the south sub-area, which employed 94 different vessels, harvested 25,060 pounds of halibut, or about 83% of its total allocation of 30,000 pounds. The total harvest from both sub-areas combined is 60,014 pounds (preliminary data).

This analysis assumes a total catch limit of 100,000 pounds for Area 4E. A reduction by the IPHC in the total catch limit is possible and could affect the outcome of comparisons of alternatives which apportion the catch limit differently between the 2 sub-areas.

4.1 Alternative 1: Status Quo

The adoption of the status quo alternative (equivalent to no action at all)

would result in the availability of 100,000 pounds of halibut to the entire 4E Regulatory Area, which includes the waters of Bristol Bay in addition to the original 4E area.

4.1.1 Biological and Physical Impacts of Alternative 1

While neither sub-area harvested its total catch allotment, the Bristol Bay fishery came close to reaching its 30,000 pound catch limit in 1990. If the status quo alternative were adopted for the 1991 fishing year, it is possible that the Bristol Bay fishery would harvest a higher portion of the overall catch limit for Area 4E than the 30% it was allocated in 1990. Because halibut are believed to migrate in a northerly direction along the Alaska Peninsula and through the Bristol Bay waters, it may be possible (theoretically) for the entire 100,000 pound catch limit for Area 4E to be harvested before reaching the Nelson Island area. The potential result is a localized depletion of halibut stocks. However, because halibut throughout the entire 4E Area are believed to be from the same stock, this would not necessarily represent a biological impact on halibut, but rather, a specific impact on the Nelson Island region (the IPHC manages the area for overall stock conservation). This would run counter to the Council's intent that the Nelson Island allocation be maintained and not be reduced by the Bristol Bay experimental effort. It should be noted that the low catch per unit effort experienced in the 1990 Bristol Bay fishery lessens the likelihood that the Bristol Bay fisheries could take the entire 4E quota.

4.1.2 Social/Economic Impacts of Alternative 1

In terms of social and economic impacts, the effects would depend on the degree to which the Bristol Bay fishery cuts into the harvests experienced by the Nelson Island fisheries. If, for example, the Nelson Island fisheries continue to harvest at the same rate as in 1990 (35,000 out of a possible 70,000 pounds), then the Bristol Bay fishery could harvest an additional 35,000 pounds without impacting the Nelson Island fisheries. At \$1.90/pound round weight (average coastwide price, source - IPHC), this would represent an increased gross economic benefit to the overall Area 4E fishery of \$66,500. Any harvest by the Bristol Bay fishery above and beyond this additional 35,000 pound would cut directly into the revenues

of the Nelson Island fishery.

Conversely, if the Nelson Island area were able to take the entire 70,000 pound limit for that sub-area that they had in 1990, then any additional catch (over 30,000 pounds) by the Bristol Bay fishery would represent an economic loss to the Nelson Island fisheries at the rate of \$1.90/pound. If the Nelson Island fisheries took the entire 100,000 pound catch limit, this would equate to a \$57,000 loss to the Bristol Bay fisheries; since this same amount amount would be gained by the Nelson Island fisheries, there would be no overall impact to the 4E area as a whole.

If the same exploitation rates from the 1990 fisheries (or the historical average of the Nelson Island fisheries) are realized in the 1991 fisheries, then the status quo alternative would have no effect on either sub-area or on the 4E Area as a whole.

4.2 Alternative 2: 70/30 split

Given the landings data shown in Table 2, a 70/30 split would provide enough halibut to satisfy the requirements of both the Nelson Island and the Bristol Bay fisheries. A total of about 40,000 pounds (35,000 from the north sub-area and 5,000 from the south sub-area) would remain unharvested from the 100,000 pound total catch limit for Area 4E. This alternative also provides enough halibut to satisfy the traditional Nelson Island fishery based on the 6 year average from 1984-1989. This alternative would be constraining on the Nelson Island fishery only if the fishery were to have another year like 1987, in which 90,000 pounds were harvested. On the other hand, the Bristol Bay fishery has only a one year track record of landings, and this fishery fell short of its catch limit in 1990 by 5,000 pounds.

4.2.1 Biological and Physical Impacts of Alternative 2

A 70/30 split would pose no biological or physical impacts to the resource as the total harvest for Area 4E would still be limited by the catch limits imposed by the IPHC.

4.2.2 Social and Economic Impacts of Alternative 2

Based on the 1990 harvest data presented in Table 1, this alternative might have no economic impacts on either sub-area or on the overall 4E Regulatory Area. In 1990, the 70/30 split provided more than enough halibut to satisfy the requirements of the Nelson Island fishery and sufficient halibut for the Bristol Bay area fishery. This alternative would also provide enough halibut to the Nelson Island fisheries based on the 6 year average of historical landings for Area 4E. This alternative provides the potential for \$133,000 in income (70,000 pounds X \$1.90/pound) for the Nelson Island fishery and \$57,000 (30,000 pounds X \$1.90/pound) in income for the Bristol Bay fishery. If either sub-area were able to increase its harvest capacity to a level beyond its catch limit, then this alternative would impose a constraint on that sub-area's fishery. The value of this lost revenue would depend on the amount that the other area left unharvested.

4.3 Alternative 3: A 50/50 split

This alternative would divide the total Area 4E catch limit equally between the north (Nelson Island) and south (Bristol Bay) sub-areas. Assuming a 100,000 pound total catch limit for the 4E Area, this would apportion 50,000 pounds to each sub-area, more than enough to execute either fishery based on the catch division from the 1990 fishery. This would also allow for the Bristol Bay fishery to harvest a larger amount of the total catch limit, if possible, thereby capturing revenues that might otherwise be foregone (in 1990, that fishery came close to its catch limit). This could be accomplished without impacting the Nelson Island area fishery, assuming that the Nelson Island sub-area does not increase its harvest capacity by more than 15,000 pounds over the 1990 level or by 12,000 pounds over its historical average.

If the Nelson Island fishery increases its catch capacity, or if the IPHC reduces the catch limit for 4E, then this alternative could be constraining on the Nelson Island fishery.

4.3.1 Biological and Physical Impacts of Alternative 3

A 50/50 split would pose no biological or physical impacts to the

resource as the total harvest for Area 4E would still be limited by the catch limits imposed by the IPHC.

4.3.2 Social and Economic Impacts of Alternative 3

The 50/50 split posed by Alternative 3 would take 20,000 pounds from the amount available to the Nelson Island fishery and add 20,000 pounds to the amount available to the Bristol Bay fishery (compared to what was in effect in 1990, or Alternative 2). If neither sub-area increases its catch over that from 1990, then this alternative would have no social or economic impacts on either sub-area or on the 4E Area as a whole. If the Bristol Bay fishery is constrained by a 30,000 pound limit, then this alternative would allow that limit to be exceeded by up to 20,000 pounds, which could be worth an additional \$38,000 (20,000 pounds X \$1.90/pound). This also assumes that the Nelson Island fishery would not increase its halibut needs by more than an additional 15,000 pounds. Given the history of that fishery (excepting the 1987 fishing year in which 90,000 pounds were harvested, it appears that a 50,000 pound limit would not be constraining, at least in the near future. Under this alternative, it would appear that the potential exists to increase the economic benefit to the overall 4E Area without detracting from the economic benefits attributable to either sub-area. However, if the Nelson Island fishery does increase its catch capacity by more than an additional 15,000 pounds, then this alternative would impose an economic loss to that fishery; this would also represent an overall economic loss to the 4E Area as a whole if the Bristol Bay fishery is unable to take advantage of the additional apportionment resulting from this alternative. If overall catch limits for Area 4E are reduced then this alternative could, again, impose constraints on the Nelson Island fishery, or the Bristol Bay fishery. The impact of such a constraint to either sub-area would be equal to the amount of halibut catch foregone as a result of the reduced catch limit multiplied by the price per pound of the halibut.

4.4 Alternative 4: A 30/70 split

This alternative proposes that the total catch limit for Area 4E be divided with 30% being apportioned to the north (Nelson Island) sub-area and 70% to the south (Bristol Bay) sub-area. Based on the landings data shown in

Table 1, this allocation scenario would not provide sufficient halibut to execute the Nelson Island fishery and would provide more than enough halibut for the Bristol Bay fishery, thereby resulting in possible foregone harvests. This alternative would run counter to the Council's intent of maintaining a Nelson Island allocation that is not to be reduced by the Bristol Bay experimental fishery.

4.4.1 Biological and Physical Impacts of Alternative 4

A 30/70 split would pose no biological or physical impacts to the resource as the total harvest for Area 4E would still be limited by the catch limits imposed by the IPHC.

4.4.2 Social and Economic Impacts of Alternative 4

This alternative proposes a 30% allotment (30,000 pounds) to the Nelson Island area of the total Area 4E catch limit. Based on a 1990 catch of 35,000 pounds, this would impose an economic loss to the north sub-area of \$9,500 (5,000 pounds X \$1.90/pound). Based on the historical average of landings in the original 4E area (37,666 pounds), this alternative would result in the loss to the north sub-area fishery of 7,666 pounds of halibut worth \$14,565. If the south sub-area were unable to harvest more than the 25,000 harvested so far in 1990, this would be the total economic loss resulting from this scenario. Additional losses to the north sub-area fishery could be realized, up to the value of halibut that could have been harvested in the absence of the 30,000 catch limit (over and above the 35,000 pound 1990 harvest but only up to the overall 100,000 pound catch limit).

If the Bristol Bay fishery could harvest the additional 45,000 pounds proposed by this alternative (70,000 pound allotment - 25,000 pound 1990 catch), then this fishery would realize an additional \$85,500 in revenues. Total economic impacts to the 4E fishery would then be \$76,000 (\$85,000 - \$9,500). Given the landings and the low catch per unit effort experienced in the Bristol Bay fishery, it is not clear that this fishery could absorb the additional allotment proposed by this alternative. Some of it might be taken, but this would have to be weighed against the likely losses incurred

by the Nelson Island fishery under this alternative.

5.0 Comparison of Biological and Physical Impacts

Because there is an overall catch limit for Regulatory Area 4E, set by the IPHC, none of the 4 alternatives would pose a biological impact to the halibut resource in general. However, because the Bristol Bay extension of Area 4E represents part of a previously closed juvenile halibut savings area, Alternative 1 and Alternative 4 could pose implications relevant to hook and line injury and mortality to sub-legal halibut which are discarded in the fishery. Alternative 1 has the potential of allowing all of the 4E catch limit to be harvested in the Bristol Bay area while Alternative 4 has the potential of allowing 70% of the total 4E catch limit to be harvested in Bristol Bay waters. Alternatives 2 and 3 pose similar concerns, but to a lesser degree. None of the alternatives would result in a physical impact on the environment.

6.0 Comparison of Social and Economic Impacts

Alternative 1 could have potential economic impacts of redistributing the halibut harvest, and subsequent income from those harvests, from the Nelson Island area to the Bristol Bay area by not dividing the 4E catch limit between north and south sub-areas. This alternative would be equivalent to no action at all and would not protect the Nelson Island fishery.

Alternative 2 would reinstate the regulations which were in effect for the 1990 fishery, with a 70% allocation to the Nelson Island fisheries and a 30% allocation to the Bristol Bay fisheries. This alternative would adequately protect the Nelson Island fishery, but may result in foregoing some amount of harvests that might potentially be taken by the Bristol Bay fishery.

Alternative 3, a 50/50 split between the 2 sub-areas, would provide sufficient halibut for the execution of the fisheries in both sub-areas (based on historical landings), and would provide some cushion against foregone harvests from either fishery.

Alternative 4 would allocate only 30% of the total 4E catch limit to the Nelson Island fishery with 70% allocated to the Bristol Bay fishery. This alternative would not provide sufficient halibut for the Nelson Island area to execute its fisheries and would result in foregone harvests and economic losses to those fisheries. This alternative would provide more than enough halibut for the Bristol Bay fishery. Increases in economic returns to this fishery could be at the expense of the Nelson Island fishery.

Either of the alternatives 2, 3, or 4 could constrain the Nelson Island harvest based on the 90,000 pound harvest taken in 1987, which suggests that the potential is there for a larger harvest than the historical average from that area.

As with any of the alternatives analyzed in this document, the social implications of the economic tradeoffs between the 2 sub-areas will depend on 2 factors: (1) the percentage of each area's total income which is represented by the halibut fishery, and (2) the distribution of the landings in each area between local and non-local boats. While the total value of the halibut in question is small relative to the overall halibut fisheries., it could be significant to an economy that has no other methods of income production. The value to an economy of \$190,000 (the maximum amount attainable by either fishery under any of the alternatives) would depend on the magnitude of other income sources. Additionally, the value of this same \$190,000 would be further tempered by the origin of the boats which produced this income. If the boats are predominately non-local, then the economic impacts to either sub-area's local communities would be minimal.

The Council indicated its desire to have a provision in this amendment which would allow for the transfer of unused quota from one sub-area to the other. Having this provision would largely mitigate any of the economic effects described in this analysis. If one of the sub-areas reaches its catch limit (for any of the alternatives in question), it could receive a transfer of unused quota from the other area, thereby possibly eliminating foregone harvests. However, the question will remain as to what point in the fishing year a quota transfer is appropriate. For example, if a sub-area has not harvested its quota by late in the fishing

year, a reapportionment to the other sub-area may occur too late for the other fishery to take advantage of it due to weather reasons. Notwithstanding this, the provision would allow for minimal impacts to either sub-area of any of the alternatives described.

7.0 EFFECTS ON ENDANGERED SPECIES AND THE ALASKA COASTAL ZONE

None of the Alternatives described here would constitute an action that might affect endangered or threatened species of their habitats within meaning of the regulations implementing Section 7 of the Endangered Species Act of 1973.

None of the alternatives described here would be federal action directly affecting the coastal zone of Alaska within the meaning of Section 307 (c) (1) of the Coastal Zone Management Act of 1972 and its implementing regulations.

8.0 FINDING OF NO SIGNIFICANT IMPACT

For the reasons discussed above, neither implementation of the status quo nor any of the alternatives to that action would significantly affect the quality of the human environment, and the preparation of an environmental impact statement on the final action is not required by Section 102 (2) (C) of the National Environmental Policy Act or its implementing regulations.

Asst. Administrator for Fisheries, NOAA

Date

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