


MEMORANDUM

TO: Council, SSC and AP Members

FROM: Clarence G. Pautzke 
Executive Director

DATE: November 29, 1990

SUBJECT: Bering Sea/Aleutian Islands Groundfish Fishery Management Plan

ACTION REQUIRED

1. Establish halibut and crab PSC apportionments.
2. Establish preliminary herring PSC apportionments.
3. Consider emergency action, if necessary, to allocate halibut PSC by quarters.

BACKGROUND

Halibut and Crab PSCs. Overall PSC limits adopted by the Council in Amendment 16 are:

<u>C. bairdi:</u>	1,000,000 crabs in Zone 1 for Zone 1 closure
Tanner crab:	3,000,000 crabs in Zone 2 for Zone 2 closure
Red king crab:	200,000 crabs in Zone 1 for Zone 1 closure
Pacific halibut:	4,400 mt catch in BSAI for Zones 1 and 2H (Area 517) closure 5,333 mt catch in BSAI for BSAI closure

The overall PSC limits are to be apportioned among five bottom trawl fisheries: DAP other, DAP rock sole, DAP deepwater turbot/sablefish, DAP flatfish, and JVP flatfish. In practice, "DAP other" primarily includes pollock and cod bottom trawl target fisheries, but also has Atka mackerel and rockfish target fisheries.

PSC apportionments must be based on the best information available. Preliminary apportionments in September were based upon a bycatch simulation model which apportioned bycatch in proportion to a fishery's expected contribution to total bycatch. The Council's preliminary PSC specifications in item D-3(c)(1) are based on the preliminary 1991 groundfish specifications which are likely to change. A model run of bycatch apportionments based upon the Council's final TAC specifications will be provided at the meeting. Please note that the Regional Director is authorized to shift unused PSC between fisheries and to subsequent quarters.

Herring PSC. Amendment 16a, adopted in September, is expected to be approved and implemented in mid-1991. It establishes an overall herring PSC bycatch cap of 1% of the Eastern Bering Sea biomass. ADF&G will provide a report to the Council on estimated herring biomass.

The cap is to be apportioned among those trawl fisheries expected to take herring as bycatch; the five fisheries listed above plus the DAP midwater pollock fishery. Attainment of a herring PSC apportionment by a fishery will trigger temporary time-area closures to that fishery along the Alaska Peninsula and closure of a herring winter savings area northwest of the Pribilof Islands from September 1 through March 1 of the following year. NMFS has indicated that it will address preliminary and final herring PSC apportionments through the proposed and final rulemaking process when Amendment 16a is in the approval and implementation process, as opposed to the groundfish specifications process. The Council needs to set preliminary herring PSC apportionments at this meeting for NMFS to publish in the notice of proposed rulemaking for Amendment 16a. Preliminary specifications are shown in item D-3(c)(1). A new table will be available after 1991 TACs are set.

Seasonal PSC Apportionments. Amendment 16 authorized the Council to apportion PSC limits seasonally. In September the Council did not preliminarily specify seasonal apportionments, but did notice the public that it may do so at its December meeting, and invited public comment on this topic. This may be interpreted as a preliminary seasonal apportionment scheme (100% at the beginning of the year, to last as long as possible through the year). However, NOAA General Counsel has indicated that this may be procedurally inadequate, and that emergency action may be necessary to apportion PSC limits seasonally in 1991. NOAA General Counsel will address this question at the meeting. In any event, the Council's record for any seasonal PSC allowances should address:

- (a) seasonal distribution of prohibited species;
- (b) seasonal distribution of target groundfish species relative to prohibited species distribution;
- (c) expected prohibited species bycatch needs on a seasonal basis relevant to changes in prohibited species biomass and expected catches of target groundfish species;
- (d) expected variations in bycatch rates throughout the fishing year;
- (e) expected changes in directed groundfish fishing seasons;
- (f) expected start of fishing effort; and
- (g) economic effects of establishing seasonal prohibited species allocations on segments of the target groundfish industry.

The Plan Team report on seasonal apportionments of PSC limits is at Appendix C of the SAFE report and a summary is under item D-3(c)(2). A petition for emergency action to seasonally apportion the halibut PSC limits in the BSAI is found under agenda item D-3(a-b)(5).

TABLE 2

Preliminary Bering Sea/Aleutian Islands PSC Apportionments

	DAP Midwater Pollock	DAP Other	DAP Deepwater Turbot/ Sablefish	DAP Rocksole	DAP Flatfish	JVP Flatfish	TOTAL
Halibut (mt)	-	3,053	440	681	69	1,090	5,333
<u>C. bairdi</u> , Zone 1 (#)	-	295,910	0	557,077	55,543	91,470	1,000,000
<u>C. bairdi</u> , Zone 2 (#)	-	1,886,864	224,520	288,275	364,920	235,421	3,000,000
Red King Crab, Zone 1 (#)	-	5,982	3	150,584	21,007	22,424	200,000
Herring (mt)	542	75	0	0	32	129	778

APPENDIX C

Seasonal Allowances of Crab and Halibut PSC Apportionments in the BSAI

The Plan Team discussed seasonal allowances of Bering Sea/Aleutian Islands PSC apportionments at its November 13-16 meeting. The Team is concerned that the large number of possible seasonal allowance patterns, and the limited information available to examine any one possibility, precludes the Team from presenting and justifying a particular recommendation to the Council.

Three significant changes will take place in the BSAI bycatch management regime in 1991: (1) a trial vessel bycatch incentive program, (2) the later opening of the flatfish (other than rock sole) fishing seasons on May 1, and (3) the allocation of the pollock TAC on a seasonal basis. The impact of bycatch constraints on the 1991 BSAI groundfish trawl fisheries will have to be assessed in light of these changes. It is doubtful that any influence of seasonal PSC apportionments could be distinguished because of these factors.

The trial vessel bycatch incentive program is expected to have an unquantified reduction on PSC bycatch rates because of the threat of substantial individual penalties for fishing with excessive bycatch rates. The Team feels that overall reduction in bycatch rates through incentives are likely to be more effective in permitting full prosecution of the groundfish fisheries than will seasonal PSC allowances.

The delay in the flatfish seasons is expected to reduce bycatch rates of (1) red king crab in the yellowfin sole/other flatfish fishery and (2) halibut in the deepwater turbot/sablefish fishery. The delay will allow the yellowfin sole fishery to be prosecuted further north, away from red king crab concentrations, and permit halibut to move out of deep water prior to the turbot fishery.

The allocation of the pollock TAC on a seasonal basis may affect the timing of other fisheries (eg. cod) which will affect the rate of bycatch over the fishing year in unknown ways.

The Team addressed the five fisheries which are to receive PSC apportionments:

Rock sole: This is a winter fishery which could be prosecuted at the very beginning or very end of the calendar year. Industry representatives at the team meeting indicated it would be preferable for the entire PSC apportionment to be available at the beginning of the year, as rock sole fishing in December is often problematic.

Flatfish [DAP and JVP combined]: The delay in the flatfish fishing seasons in 1991 is expected to allow these fisheries to proceed with lower bycatch rates as the ice edge will have receded by May 1 when the fisheries are scheduled to begin. This will allow the flatfish fisheries to focus on migrating stocks north of Zone 1 where red king crab are concentrated. The Team has no basis at this time to recommend seasonal allocations over the rest of the year.

Deepwater sablefish/turbot: Again, the delay in the turbot fishery, combined with the limited allocation of sablefish to the trawl fishery, is expected to allow the fishery to proceed with lower bycatch rates. In 1990, high bycatch rates were encountered due to the early prosecution of the turbot fishery when halibut were also in deep water. Delay of the turbot fishery until May 1 is expected to reduce permit the halibut bycatch because halibut will have moved into shallower waters by that date.

DAP Other: This fishery comprises principally bottom trawling for Pacific cod and walleye pollock. The bycatch demand for this fishery will vary with the size of the pollock TAC, the portion of the pollock TAC allocated to the roe-season, and desire of operators to fish for P. cod relative to other species. None of these factors can be predicted adequately by the Team. A suggestion that the apportionment be equally divided among seasons on a trial basis was objected to by industry representatives at the meeting; the Team has no basis for arguing that seasonal allowances are preferable over this objection.

TESTIMONY OF ARNI THOMSON, EXECUTIVE DIRECTOR, ALASKA
CRAB COALITION TO THE NORTH PACIFIC FISHERY MANAGEMENT
COUNCIL, ANCHORAGE, ALASKA, DECEMBER 5, 1990

COMMENTS ON AMENDMENT 16 TO THE BERING SEA/ALEUTIAN ISLANDS
FISHERY MANAGEMENT PLAN FOR BYCATCH MANAGEMENT IN 1991

Mr. Chairman and members of the NPFMC, it has been the experience of the Alaska Crab Coalition (ACC) that there are positive economic benefits to the evolving fixed cap bycatch management program in the Bering Sea.

Looking back to 1986, the NPFMC reinstated a no trawl zone in the Eastern sector of the Bristol Bay king crab habitat and fixed caps in the joint venture flatfish fisheries in the Western sector of Bristol Bay. At that time, the ACC also successfully petitioned the Alaska Department of Fish and Game to close the severely depressed bairdi crab fishery in that area. The gross ex vessel revenue for Bering Sea crab fisheries that year totaled an estimated \$160 million dollars.

At the conclusion of 1990, the ex vessel revenue for all Bering Sea/Aleutian Islands crab fisheries now exceed the ex vessel value of the widely heralded pollock fishery at \$300 million dollars. Of this amount, \$150 million dollars worth of king and tanner crab has been taken in the Zone 1 Bristol Bay area, yet king crab stocks are still considered to be in a depressed condition. A further breakdown shows that 80% of the product is either processed ashore or on floating processors, inside State waters. Thus the boats and processors have contributed an estimated \$15 million dollars in raw fish taxes to the State, the East Aleutian Borough and the City of Unalaska. The first wholesale value of the crab exceeds a half a billion dollars.

The ACC disagrees with the American Factory Trawler Association's unsubstantiated claims that foregone revenues to the groundfish industry in 1990 due to flaws in Amendment 12A (and #16) amount to \$140 million dollars. At the June and September 1990 Council meetings the ACC submitted extensive comments for the Administrative Record on this aspect of Amendment 16. Foregone revenues are closer to \$30 to \$40 million dollars and these are more than offset by downstream benefits, in terms of juvenile crab and halibut saved from bycatch mortality in the trawl fisheries.

The ACC thinks there are substantial improvements contained within Amendment 16 and we support those measures:

- 1) The delayed opening of flatfish until May first may preclude the need for flatfish fishing in Zone 1, with the exception of rock sole.

2) The "hot spot authority" will permit the Regional Director to close areas inseason that demonstrate high crab, halibut, herring or salmon bycatch.

3) There is a new vessel incentive program that will apply to the high impact flatfish and cod fisheries.

The ACC sees these changes as major improvements to bycatch control in the Bering Sea and we feel they will assist in optimizing groundfish quotas.

I would like to close my testimony with a few historical comments.

1) In 1959, the same year the Territory of Alaska became a State, the Board of Fisheries instituted a Statewide gear restriction for all king and tanner crab fisheries. Trawl gear and tangle nets, customary gear in crab fisheries for the Japanese and Soviets, was prohibited because it was found to be non selective. Use of this gear resulted in capture and mortality to females and juvenile crabs and continued use of such gear would have caused severe damage to the reproductive capability of the stocks.

2) A reminder to the Council members that foreign nations were able to optimize groundfish quotas until 1981, with no trawling whatsoever in 90% of of the existing Zone 1 Bristol Bay king crab area. In 1981, following the collapse of king crab stocks, the NPFMC relaxed the prohibition on trawling in this area to encourage the development of a US/Soviet joint venture for yellowfin sole. The fishery expanded rapidly and since 1985, American catcher boats and factory trawlers have been harvesting yellowfin sole, flatfish and rock sole in this sensitive king crab habitat with non selective trawl gear that continues to abort a substantial recovery to king crab stocks and the potential economic opportunities, similar to the salmon industry, that could materialize from long term sustained yields.

Table 1.2.-- Relative impact on groundfish harvests resulting from various assumptions of adjusted average bycatch rates under the Advisory Panel's bycatch rate standards (BRS) recommended for the 1991 vessel incentive program.

	1990 catch	Ave. bycatch rate (%)	Calculated bycatch 1990	BRS	Projected bycatch amounts based on % (BRS) and associated effect on groundfish harvests (mt)			Proj bycatch (EA/RIR)
					.9	.8	.7	
BSAI HALIBUT								
<u>Cod</u>								
qtr1	74,673	1.35	1008 mt halibut	1.35	1.215% 907 mt hal 8,313 mt cod	1.08% 806 18,704	0.945% 706 31,958	0.89% 665 38,539
qtr2	50,831	1.85	940 <u>1,948</u> mt hal	1.85	1.66% 846 mt hal 5,663 mt cod 1,753	1.48% 752 12,703 1,558	1.295% 658 21,776 1,364	0.96% 488 47,083 1,153
qtr3	no fishing							
qtr4	no fishing							
<u>Flatfish</u>								
qtr 1	25,692	1.31	337	1.31	1.179% 303 mt hal 2,884 mt flt	1.048% 269 6,489	0.917% 235 11,123	0.92% 236 10,978
qtr2	no fishing							
qtr3	9,093	0.17	15	0.30	0.27% 25 mt hal (3,704)mt flt	0.24% 22 (2,917)	0.21% 19 (1,904)	0.17% 15 0
qtr4	7,778	0.19	15 <u>367</u> mt hal	0.40	0.36% 28 mt hal (3,611) mt flt 356	0.32% 25 (3,125) 316	0.28% 22 (2,500) 276	0.19% 15 0 266
			TOTAL HALIBUT		2,109	1,874	1,640	1,419
BSAI RED KING CRAB (Zone 1 only)								
<u>Flatfish</u>								
qtr1	20,391	2.88	58,726 crab	2.88	2.59 52,813 crab 2,283 mt flt	2.30 46,899 5,142	2.02 41,190 8,681	1.70 34,665 14,154
qtr2 - qtr4	no fishing							

Table 1.2 (Cont.)

	1990 catch	Ave. bycatch rate (%)	Calculated bycatch 1990	BRS	Projected bycatch amounts based on % (BRS) and associated effect on groundfish harvests (mt)			Proj bycatch (EA/RIR)	
					.9	.8	.7		
GOA HALIBUT									
<u>Cod</u>									
qtr1	27,646	3.31	915 mt halibut	3.31	2.979% 824 mt hal 3,055 mt cod	2.648% 732 6,911	2.317% 641 11,826	0.33% 91 249,696	
qtr2	15,473	3.06	473	4.13	3.717% 575 mt hal (2,744)mt cod	3.304% 511 (1,150)	2.891% 447 899	0.46% 71 87,391	
qtr3	10,197	3.29	335	3.29	2.961% 302 mt hal 1,114 mt cod	2.632% 268 2,546	2.303% 235 4,342	0.42% 43 69,524	
qtr4	3,873	5.15	199	5.15	4.635% 180 mt hal 409 mt cod <u>1,922</u> mt hal	4.12% 160 947 <u>1,671</u>	3.605% 140 1,637 <u>1,463</u>	0.48% 19 <u>37,500</u> <u>224</u>	
<u>Rockfish</u>									
qtr1	2,255	2.91	66	4.00	3.6% 81 mt hal (417)mt rkfh	3.2% 72 (188)	2.8% 63 107	1.12% 25 3,661	
qtr2	8,177	3.31	271	4.00	3.6% 294 mt hal (639)mt rkfh	3.2% 262 281	2.8% 229 1,500	1.65% 135 8,242	
qtr3	8,344	1.96	164	4.00	3.6% 300 mt hal (3,777)mt rkfh	3.2% 267 (3,219)	2.8% 234 (2,500)	0.83% 69 11,446	
qtr4	1,386	8.49	<u>118</u>	4.00	3.6% 50 mt hal 1,889 mt rkfh <u>725</u>	3.2% 44 <u>2,312</u> <u>645</u>	2.8% 38 <u>2,857</u> <u>564</u>	0.01% .14 <u>1,178,600</u> <u>229</u>	
			TOTAL HALIBUT		2,541	2,606	2,316	2,027	453