

MEMORANDUM

TO: Council and Board Members

FROM: David Witherell
Fishery Biologist

DATE: January 20, 1999

SUBJECT: Bering Sea crab

ACTION REQUIRED

- (a) Status report on development of a rebuilding plan for Bering Sea Tanner crab (*C. bairdi*).
- (b) Status report on the CDQ crab fishery.

BACKGROUND

(a) Rebuilding plan for Bering Sea Tanner crab

The Bering Sea Tanner crab (*C. bairdi*) stock will be declared "over fished" based on the minimum stock size thresholds (MSST) proposed for crab under Amendment 7 to the BSAI king and Tanner crab FMP. The national standard guidelines require a rebuilding plan for any over fished stock, and with a rebuilding time period less than 10 years unless life history characteristics dictate otherwise. In October 1998, the Council voted to move forward with an aggressive rebuilding plan for this stock. Since that time, the Crab Plan Team has been working on the rebuilding plan analysis.

Scientific data suggests that the *bairdi* stock may actually be comprised of two separate stocks east and west of a dividing line in the vicinity of 168°W (just east of the Pribilof Is). The evidence for two separate stocks comes from differences in growth, size frequencies, size at maturity, and genetic work. From the standpoint of the analysis, the Team will need to develop new overfishing, MOST, and MSY definitions for each stock, as well as develop two separate rebuilding plans.

The rebuilding plan(s) is composed of three parts: a new harvest strategy, evaluation of bycatch control measures, and habitat protection. ADF&G is developing a new harvest strategy for Tanner crabs which the Board of Fisheries will consider in March. ADF&G is analyzing a stairstep harvest rate and associated thresholds, along the lines of the strategy developed two years ago for Bristol Bay red king crab. The approach was recommended by the plan team and advocated by NMFS.

The second part of the rebuilding plan is an evaluation of bycatch control measures in both the crab and groundfish fisheries (the scallop fishery does not have high bycatch of *bairdi*). The *opilio* crab fishery may be prohibited from fishing in areas with high bycatch rates of *bairdi*. New research indicates that mortality of *bairdi* may be high when subjected to windchill in freezing temperatures. For groundfish fisheries, new bycatch limits or zones may be proposed based on stock separation.

Habitat protection will also be considered as a component to the rebuilding plan. Unlike red king crab, Tanner crab do not seem to require well defined habitat types for settlement. Survey, groundfish observer, and crab observer data will be examined to see if there are any "hotspot" habitat areas for *C. bairdi*. Protection of important habitat areas could range from designation as a habitat area of particular concern to year-round or seasonal closure of the area to specific or all gear types. The Council is scheduled to review the analysis in April.

(b) CDQ Crab Fishery

The 1998 spring *C. opilio* CDQ crab fishery lasted from late March to late May. There was 100% observer coverage. The groups harvested 8.85 million pounds, which was 99.5% of their allocation. A total of 21 boats participated. One group (St. Paul), exceeded its allocation by 1,703 pounds.

In the 1998 fall fisheries, only one CDQ group (St. Paul) received an allocation to fish the Pribilof red and blue king crab CDQ fishery. They harvested 99.3% of their allocation (35,703 pounds). The remaining five groups fished the St. Matthews blue king crab CDQ fishery. Four of the groups co-oped using one vessel; because the quota was so small they all delivered to one processor. The total CDQ harvest was 98,918 of 99,512 pounds or 99.4% of the allocation. The four groups delivered to Icicle. The fifth group, APICDA, delivered to Trident.

In the Bristol Bay red king crab CDQ fishery, five groups harvested 524,336 pounds of a 525,115-pound CDQ allocation (99.9% of allocation). Four groups delivered to Icicle and one to Trident.

In general, there was 100% observer coverage for all CDQ vessels. There was no *bairdi* fishery for 1998, no Norton Sound CDQ fishery (the Norton Sound red king crab fishery only caught 30,000 of 80,000 pounds GHL), and there was no preseason *opilio* CDQ fishery. Preseason CDQ fishing is on the BOF agenda for discussion during the March board meeting. The Board approved an Agenda Change Request at their Wasilla work session in October.

The Department has decided to reduce observer coverage in the 1999 CDQ *opilio* fishery as detailed in their December news release. Originally, the Department required 100% observer coverage for the first 1998 *opilio* CDQ fishery. Each group used about four boats to harvest their *opilio* quota, resulting in a considerable expense to cover observer costs. After reviewing the fishery performance, Department staff concluded that a reduction in observer coverage would be acceptable for the *opilio* fisheries in 1999, and possibly beyond. One observer is now required per CDQ group, or about 25% coverage. For the present, the reduced observer coverage will not apply to the smaller fall king crab fisheries.

Pursuant to the Magnuson-Stevens Act, the 1999 CDQ fisheries will harvest crab based on a 5.0% allocation, up from 3.5% in 1998. The CDQ crab allocation increases to 7.5% in the year 2000.

MEMORANDUM

TO: Council and Board Committee Members

FROM: Chris Oliver
NPFMC Deputy Director

DATE: January 13, 1999

SUBJECT: Bering Sea crab

ACTION REQUIRED

- (c) Status report on Crab License Limitation Program
- (d) Status report on CRAB License Buyback Program

BACKGROUND

Several related events are influencing resolution of both the crab license limitation program (by the Council) and the associated license buyback program (being proposed and developed by the Crab Reduction and Buyback - CRAB - Group). The Council's original license limitation program (LLP) granted licenses to a total of 365 vessels, while its action in October 1998 reduced the number of eligible vessels to 297 (including small vessel exemptions granted by the Council), or about a 20% reduction in the overall crab fleet. The attachment to this memo contains information provided to the Council in December, when it was scheduled to consider revisiting its October action and possibly adopt more restrictive measures to further reduce the eligible fleet. More restrictive measures have been advocated by many in the crab fisheries, as well as by ADF&G and the Board (via letter from BOF Chairman White).

The Council did not take any action in December but scheduled this issue for consideration at its April 1999 meeting. The LLP is scheduled for implementation by NMFS in January 2000, though an interim permit program is likely for the crab fisheries, since NMFS has to go through an application and appeals process before granting permanent license privileges. While the Council's consideration of basic crab LLP eligibility remains pending, it is also grappling with provisions of the American Fisheries Act (AFA) which have the potential to further impact the configuration of the crab fleet operating in the BSAI. For example, Council staff is developing analyses of several proposed 'sideboard' amendments that are designed to limit participation in non-pollock fisheries by those vessels which qualify for pollock privileges under the AFA. One option is to simply limit participation of these vessels, in both non-pollock groundfish and crab, to their historical levels so that they cannot increase their participation in those fisheries. Other options include severing all or part of the crab species endorsements that were earned by these vessels under the original LLP requirements. A Council decision on these alternatives is scheduled for June 1999.

In summary, there are two major actions that can potentially impact the number of vessels which qualify to fish for crab in the BSAI, as well as impact their particular species endorsements. The Council is scheduled to address these decisions in April and June, respectively. Until those decisions are made, and we know how many vessels indeed qualify, further action on the proposed CRAB buyback program is on hold. The CRAB Group, headed by Mr. Gordon Blue, has devoted considerable time and effort to development of a draft business plan for such a buyback program; however, the details of that plan hinge directly on the number of eligible vessels (and endorsements), the target number to be bought out, and therefore, the specific cost to the industry of such a buyback program. An industry referendum is required, with a two-thirds approval from the participants, in order for NMFS to proceed with such a plan. We expect that once the Council resolves the decision points noted above, we will work with the drafters of the CRAB buyback plan to revise the plan as necessary and get it moving forward to implementation.

Summary of Licenses Under Various Crab LLP Alternatives

Table 1 contains a summary of the number of licenses and endorsements that are projected to be issued under Alternative 9. If the Council takes no action on crab LLP at this meeting, these are the crab licenses that are expected to be issued in 2000.

The number of vessels and endorsements are slightly different from those reported in October. The changes are primarily due to exemptions included within the Council's preferred alternative and updates to the vessel transfer information. Excluding vessels that were added to the list of qualifiers through an exemption, the number of qualified vessels increased by 13 over those reported in October. Four vessels were added because of corrections to the qualification data base. The remaining additions were made because of updates to the transfer data.

Table 1. Number of Crab Licenses and Endorsements Under Alternative 9

Vessel Length	Number of Vessels	BSAI Tanner	D.Harbor Brown	St.Matt. Blue/Red	Prib. Blue/Red	Adak Brown	Adak Red	B.Bay Red
<60'	14	2	-	-	12	-	-	4
60-124'	199	193	10	126	105	12	21	192
≥125'	84	83	8	57	37	11	8	82
Total	297	278	18	183	154	23	29	278

Note: Excludes vessels only qualified for a Norton Sound endorsement, vessels under construction, and the 1998 landings exemption.

Table 2 shows the number of vessels and endorsements that were expected to be issued under the original crab LLP passed by the Council in June 1995. A total of 365 vessels were projected to have qualified under this alternative. This is 68 more vessels than would qualify under Alternative 9.

Table 2. Number of Crab Licenses and Endorsements Under the Original (June 1995) LLP Program.

Length Class	Number of Vessels	BSAI Tanner	D.Harbor Brown	St.Matt. Blue/Red	Prib. Blue/Red	Adak Brown	Adak Red	B.Bay Red
<60'	14	2	-	-	12	-	-	4
60-124'	253	226	11	137	122	16	22	239
≥125'	98	95	10	64	41	11	9	93
Total	365	323	21	201	175	27	31	336

Note: Excludes vessels only qualified for a Norton Sound endorsement, vessels under construction, and the 1998 landings exemption.

Tables 3 and 4 are updated summaries of the number of vessels that are projected to qualify under Alternatives 2 through 11, and the number of endorsements issued by fishery within each alternative. The Table reporting

the number of vessels is broken out by the three vessel length classes. This format of reporting vessel classes is slightly different from that used in the LLP EA/RIR document reviewed at the October meeting. Recall in that document the vessel classes provided more detail on the characteristics of the vessels that would qualify. For example, there were categories including Factory Trawlers, Pot Cvs 60'-124', and Trawl Cvs 60'-124'. However, it was not possible to determine exactly how many vessels were in each of the three length classes.

Table 3. Number of Vessels Under Alternatives 2 through 11

Alternatives	Qualified				Not Qualified			
	0-59'	60-124'	125'+	Total	0-59'	60-124'	125'+	Total
Alt. 2: 1996	14	175	74	263	0	68	34	102
Alt. 3: 1995 & 96	14	169	67	250	0	74	41	115
Alt. 4: 1996 & 97	14	169	68	251	0	74	40	114
Alt. 5: 1997 & 98	14	143	63	220	0	100	45	145
Alt. 6: 1995-97	14	163	61	238	0	80	47	127
Alt. 7: 1996-98	14	142	60	216	0	101	48	149
Alt. 8: 1995-98	14	141	55	210	0	102	53	155
Alt. 9: Once, 1996-98	14	199	84	297	0	44	24	68
Alt. 10: Once, 1995-98	14	209	87	310	0	34	21	55
Alt. 11: Twice, 1995-98	14	188	80	282	0	55	28	83

Note: Excludes vessels only qualified for a Norton Sound endorsement, vessels under construction, and the 1998 landings exemption.

Table 4. Number of Endorsements Under Alternatives 2 through 11

Alternatives	BSAI Tanner		Adak Brown		Adak Red		Bristol Bay Red		D. Harbor Brown		Pribilof Blue/Red		St. Matt. Blue/Red	
	Q	N	Q	N	Q	N	Q	N	Q	N	Q	N	Q	N
	Alt. 2: 1996	244	79	23	4	27	4	244	92	18	3	145	30	170
Alt. 3: 1995 & 96	231	92	20	7	26	5	232	104	16	5	143	32	165	36
Alt. 4: 1996 & 97	233	90	22	5	27	4	233	103	17	4	139	36	164	37
Alt. 5: 1997 & 98	203	120	18	9	24	7	204	132	16	5	132	43	156	45
Alt. 6: 1995-97	220	103	19	8	26	5	221	115	15	6	137	38	159	42
Alt. 7: 1996-98	199	124	18	9	23	8	200	136	16	5	129	46	152	49
Alt. 8: 1995-98	193	130	16	11	23	8	194	142	14	7	128	47	149	52
Alt. 9: Once, 1996-98	278	45	23	4	29	2	278	58	18	3	154	21	183	18
Alt. 10: Once, 1995-98	288	35	24	3	29	2	289	47	19	2	159	16	185	16
Alt. 11: Twice, 1995-98	263	60	23	4	29	2	263	73	18	3	153	22	179	22

Note: Excludes vessels only qualified for a Norton Sound endorsement, vessels under construction, and the 1998 landings exemption.

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

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November 4, 1998

Mr. Richard B. Lauber, Chairman
North Pacific Fishery Management Council
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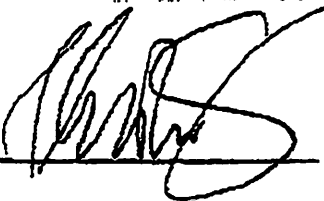
Dear Chairman Lauber:

The Alaska Board of Fisheries understands that the North Pacific Fishery Management Council will be considering the combined impacts of SB 1221 and the council's License Limitation Program (LLP) on the State of Alaska's management of Bering Sea and Aleutian Islands king and Tanner crab fisheries during your special November meeting. The Board of Fisheries wishes to provide the following comments.

Several BSAI crab stocks have experienced recent periods of low abundance. The Board of Fisheries adopted a conservative harvest strategy for Bristol Bay red king crabs in 1996, and we plan to similarly consider a conservative harvest strategy and rebuilding plan for Eastern Bering Sea Tanner crabs in March 1999. These new management plans may not maximize yield but they will provide better biological protection when stocks are low.

For some time now the Board of Fisheries has been concerned with maintaining a manageable number of vessels in the BSAI crab fisheries. An effort limitation program needs to recognize that crab stocks are not characterized by stability: periodic recruitment leads to large increases and decreases in stock abundance over relatively short periods of time. In the past, periods of high crab productivity stimulated increases in fishing effort that led to a highly overcapitalized fleet during periods of average or low crab productivity. The Board believes that the appropriate number of vessels is significantly less than 250 vessels. Increased participation substantially affects the Board's and the Staff's ability to manage these fisheries.

There is a substantial record to support this determination. A presentation of the salient portions of this record will be presented at the Council meeting. The Board respectfully requests that the Council revisit its recent action affecting the crab LLP and lowers its determination of the number of vessels able to participate in these fisheries.



Dr. John White, Chairman
Alaska Board of Fisheries