

MEMORANDUM

TO: Council, SSC and AP Members
FROM: Chris Oliver *Chris*
Acting Executive Director
DATE: February, 2001
SUBJECT: BSAI Crab Management

ESTIMATED TIME
1 HOUR

ACTION REQUIRED

Receive report from Crab Plan Team.

BACKGROUND

In October, the BSAI Crab Plan Team provided comments on a proposal to reduce opilio bycatch limits in trawl fisheries and prohibit trawling in areas with opilio crab. The Council requested the crab plan team to examine the 2000 bycatch of opilio crab in trawl fisheries within the C. Opilio Bycatch Limitation Zone (COBLZ) and Area 517, and consider possible boundary line changes for the COBLZ relative to previous industry negotiations on opilio bycatch management measures.

The Team met by teleconference on January 25 to discuss this matter. The Team recommended maintaining status quo for opilio bycatch limits, but suggested that the Council discuss including opilio in the vessel incentive program (VIP). Minutes are attached as Item D-2 (a).

**Draft Minutes of the Bering Sea/Aleutian Islands Crab Plan Team Meeting,
January 25, 2001**

Members Present

Wayne Donaldson (ADF&G)
Gretchen Harrington (NMFS, vice-chair)
Rance Morrison (ADF&G)
Doug Pengilly (ADF&G, chair)
Bob Otto (NMFS)

Herman Savviko (ADF&G)
Tom Shirley (UAF)
Shareef Siddeek (ADF&G)
Jack Turnock (NMFS)
Dave Witherell (NPFMC)

Also present: Gordon Blue, Dorothy Childers, John Gauvin, John Hendershedt, Sue Salvesson (NMFS), Karen Wood Dibari, Jie Zheng, Kristen Mabry

The Bering Sea/Aleutian Islands (BSAI) Crab Plan Team met via teleconference on January 25, 2001. The purpose of the meeting was to review the bycatch of *Chionoecetes opilio* crab during 2000 in trawl fisheries within the *C. opilio* Bycatch Limitation Zone (COBLZ) and Area 517, and to consider possible boundary line changes for the COBLZ relative to previous industry negotiations on *opilio* bycatch management measures.

Review of the 2000 trawl fishery *opilio* bycatch

Dave Witherell provided a summary table of *opilio* bycatch inside the COBLZ, outside the COBLZ, inside Area 517, and total in the trawl fisheries for 1998, 1999, and 2000 (attached). Total estimated trawl fishery bycatch of *opilio* was down from 4.1 million crabs in 1998, but up from 1.4 million crabs in 1999, to 3.0 million crabs in 2000. Within the COBLZ the trawl bycatch was 2.2 million crabs; the bycatch in Area 517 was 0.1 million crabs.

Bob Otto provided charts of catch (number) per nautical square mile of immature female, mature female, sublegal male, and legal male *opilio* by station during the 2000 NMFS eastern Bering Sea trawl survey (attached). Immature and mature female *opilio* were largely contained within the COBLZ. Males were more broadly distributed, but highest densities of sublegal males and, to a lesser extent, legal males were encountered in the COBLZ. Bottom temperatures during the survey, which may affect *opilio* distribution, were "average." Otto suggested that the trends in *opilio* bycatch levels over 1998-2000 corresponded with the *opilio* survey population estimates for those survey years: the increase in bycatch during 2000 relative to 1999 corresponded with a more than doubling of the population estimate between 1999 and 2000.

Public Comments and Discussion

Comments were provided by John Gauvin, Gordon Blue, and Karen Wood Dibari. John Gauvin estimated 1.0 – 1.3 million crabs in the *opilio* trawl bycatch during 2000 could be attributed to five vessels in the yellowfin sole fishery and provided a table listing the "top fifty" *opilio* vessel-weeks during the 2000 yellowfin sole fishery (attached table). He also stated that those five vessels were the only vessels that did not participate in the industry's SeaState bycatch monitoring program. Gauvin suggested that the Council institute a vessel incentive program (VIP) for the yellow fin sole

fishery to control bycatch of *opilio* and offered 25 *opilio* per ton as a standard for reducing bycatch that is achievable by vessels. Gordon Blue supported a VIP program for the yellow fin sole fishery and stressed the need for vigilance in bycatch monitoring. Karen Wood Dibari encouraged the Plan Team to continue scrutinizing *opilio* bycatch levels and distribution relative to the *opilio* stock levels and distribution. Dorothy Childers asked if the 1996 Industry Agreement on Snow Crab PSC Limits would be subjected to its five year review and Dave Witherell answered that the Plan Team had reviewed the Agreement last year during the development of the Bering Sea *opilio* Rebuilding Plan.

Sue Salvesson provided answers to team members on implementing and enforcing a VIP program. She said that VIP programs are a positive step for reducing bycatch, but that there are potential problems due to resources for enforcing VIP programs and the pressures that VIPs can exert on the observers. Rance Morrison noted that a VIP program could still provide a deterrent even without the resources to fully prosecute all offenders.

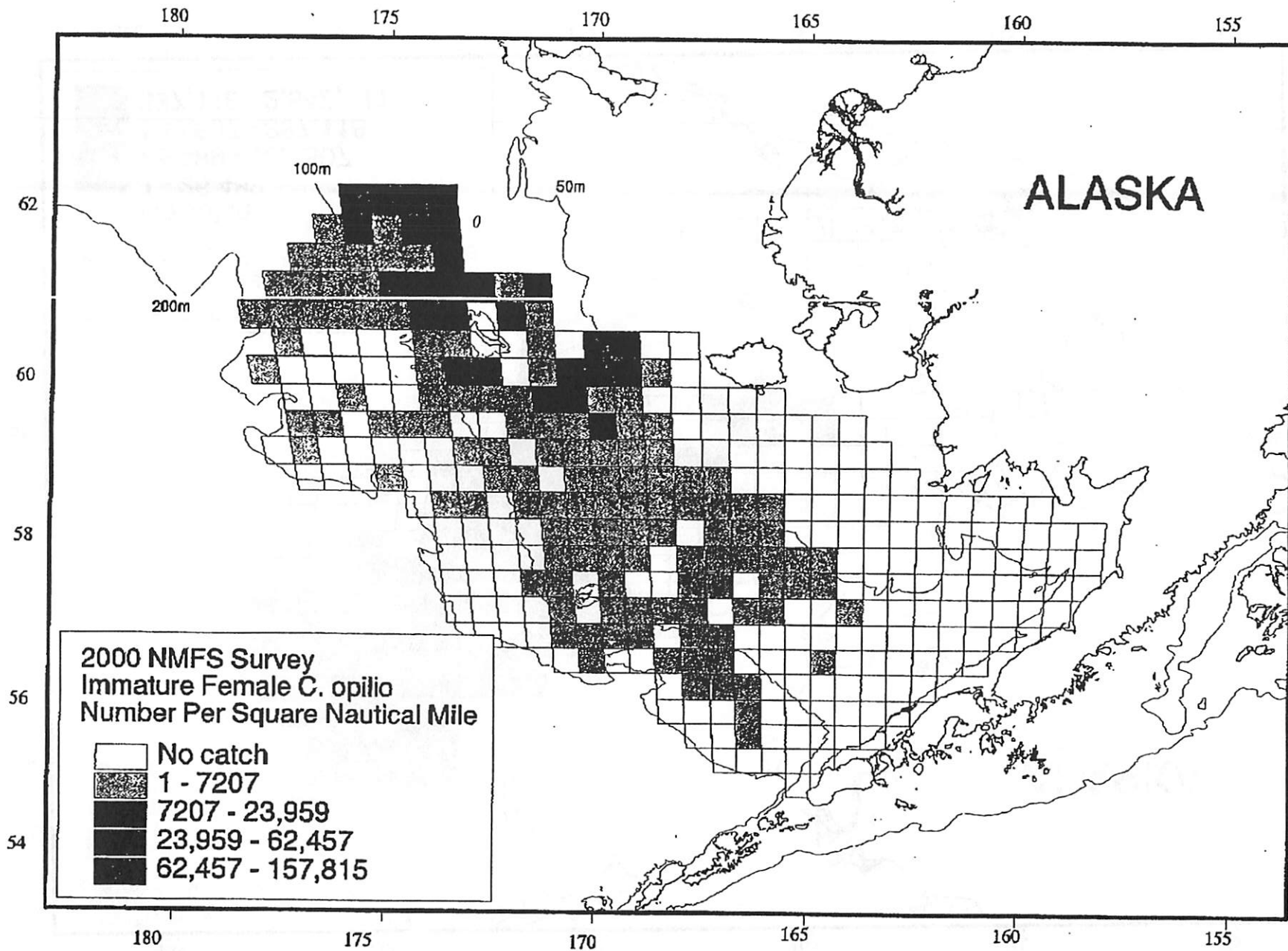
Crab Plan Team Recommendations

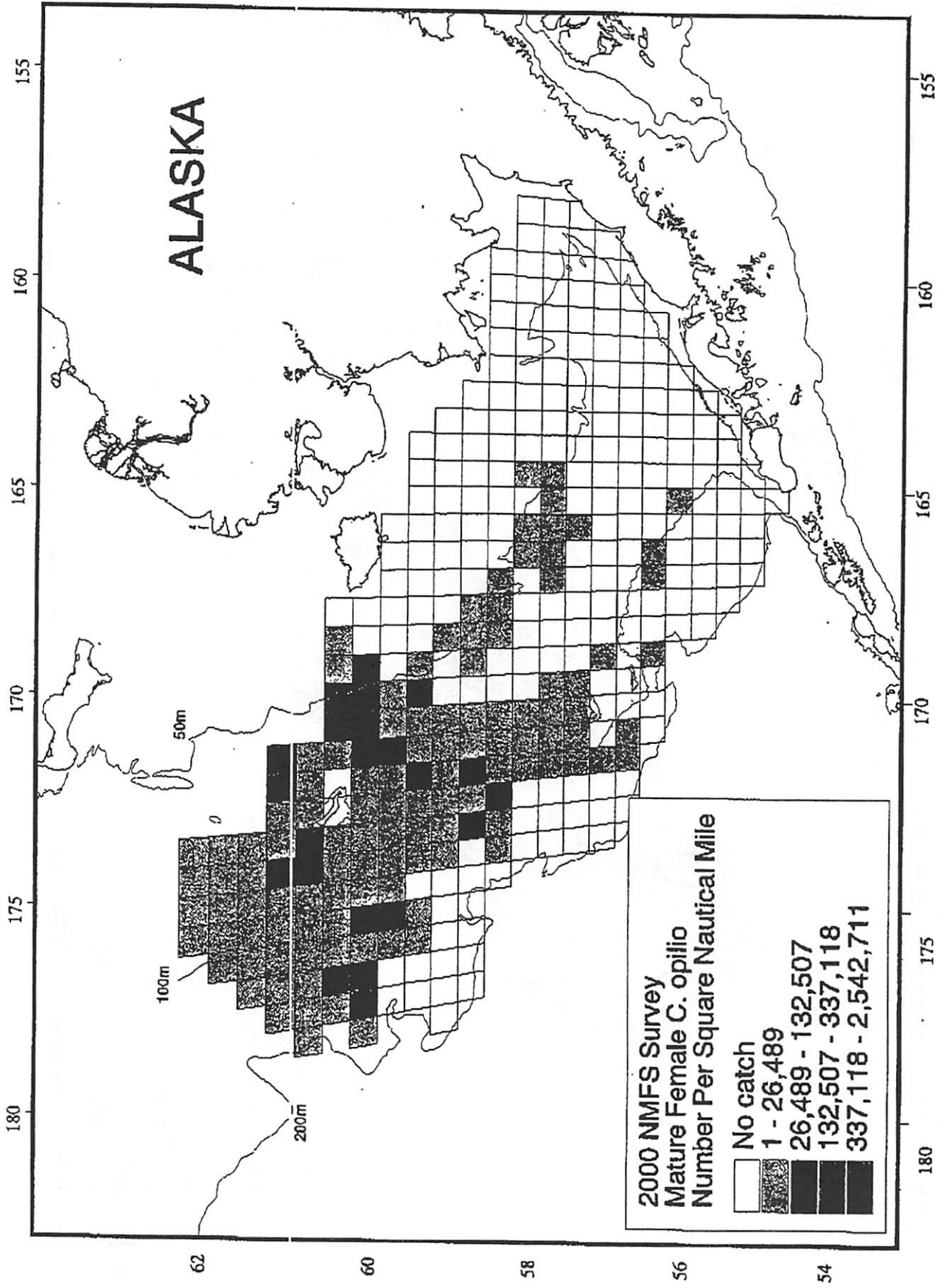
The Plan Team voted unanimously to recommend that bycatch outside of the COBLZ not be counted towards triggering the closure of the COBLZ, that the COBLZ not be expanded to include Area 517, and that the Council should consider a VIP program in the yellow fin sole fishery with consideration of 25 *opilio* per ton as the initial standard.

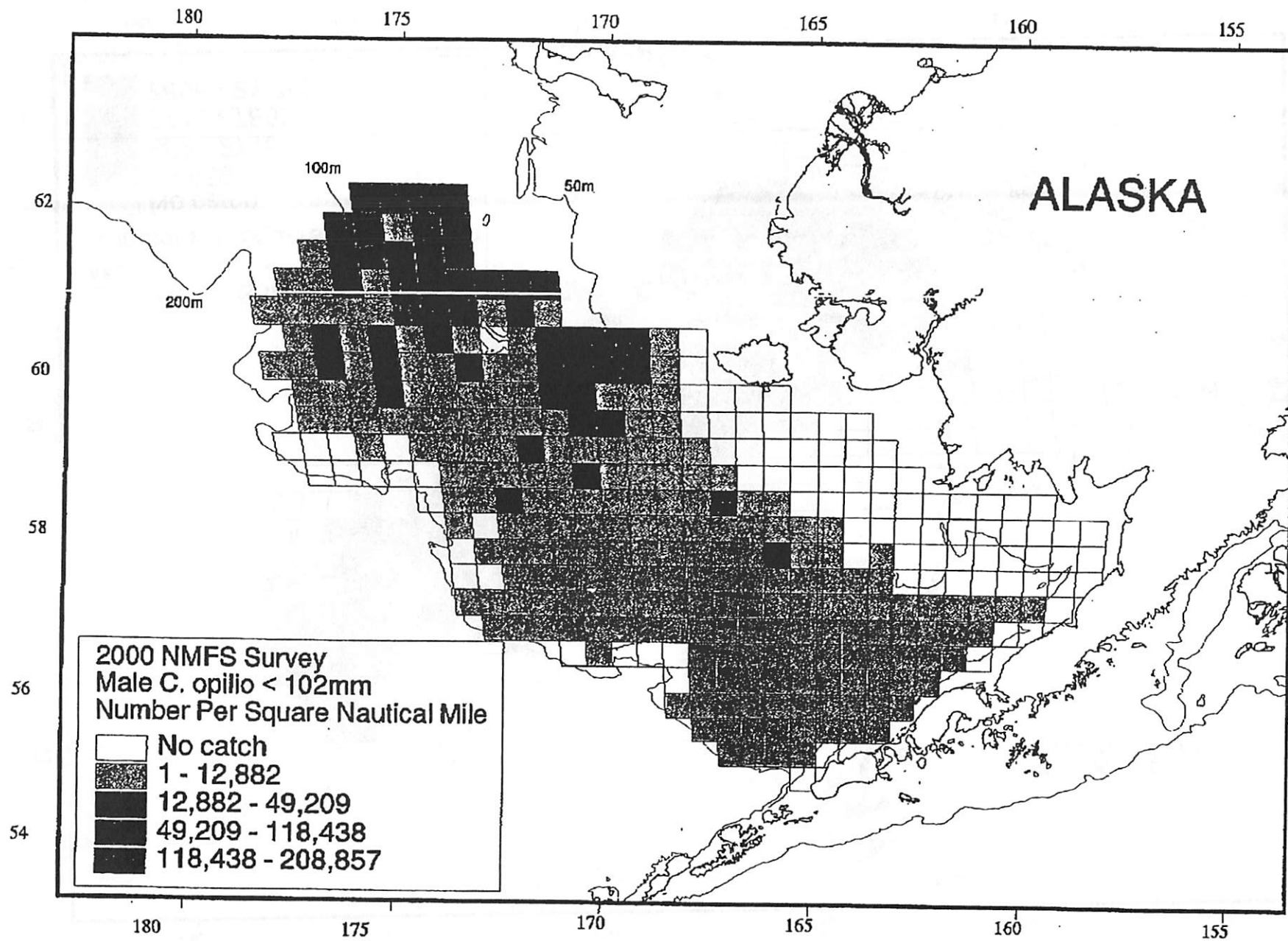
The Plan Team had reviewed the current bycatch control limits and COBLZ boundaries twice during 2000 and did not find that the survey distribution and trawl bycatch of *opilio* reported for 2000 provided new information indicating a need to change those bycatch controls. The COBLZ still appears to provide the best boundaries for controlling bycatch of *opilio*. The same problems with lowering the 4.5 million crab bycatch "ceiling" at low stock levels, that the Plan Team recognized during their reviews in 2000, still remain. The increase in bycatch during 2000 relative to 1999 appears to be due to an increase in *opilio* abundance and the actions of a few vessels. The Plan Team does not wish to disrupt the fishing opportunities of the majority of the trawl fleet for the actions of an apparently few vessels that are not minimizing their bycatch. Lowering the bycatch limits at low stock levels could do exactly that. VIPs, on the other hand, could provide a mechanism for behooving all vessels to minimize bycatch of *opilio* without disrupting the fishing opportunities for those vessels already working to minimize their bycatch.

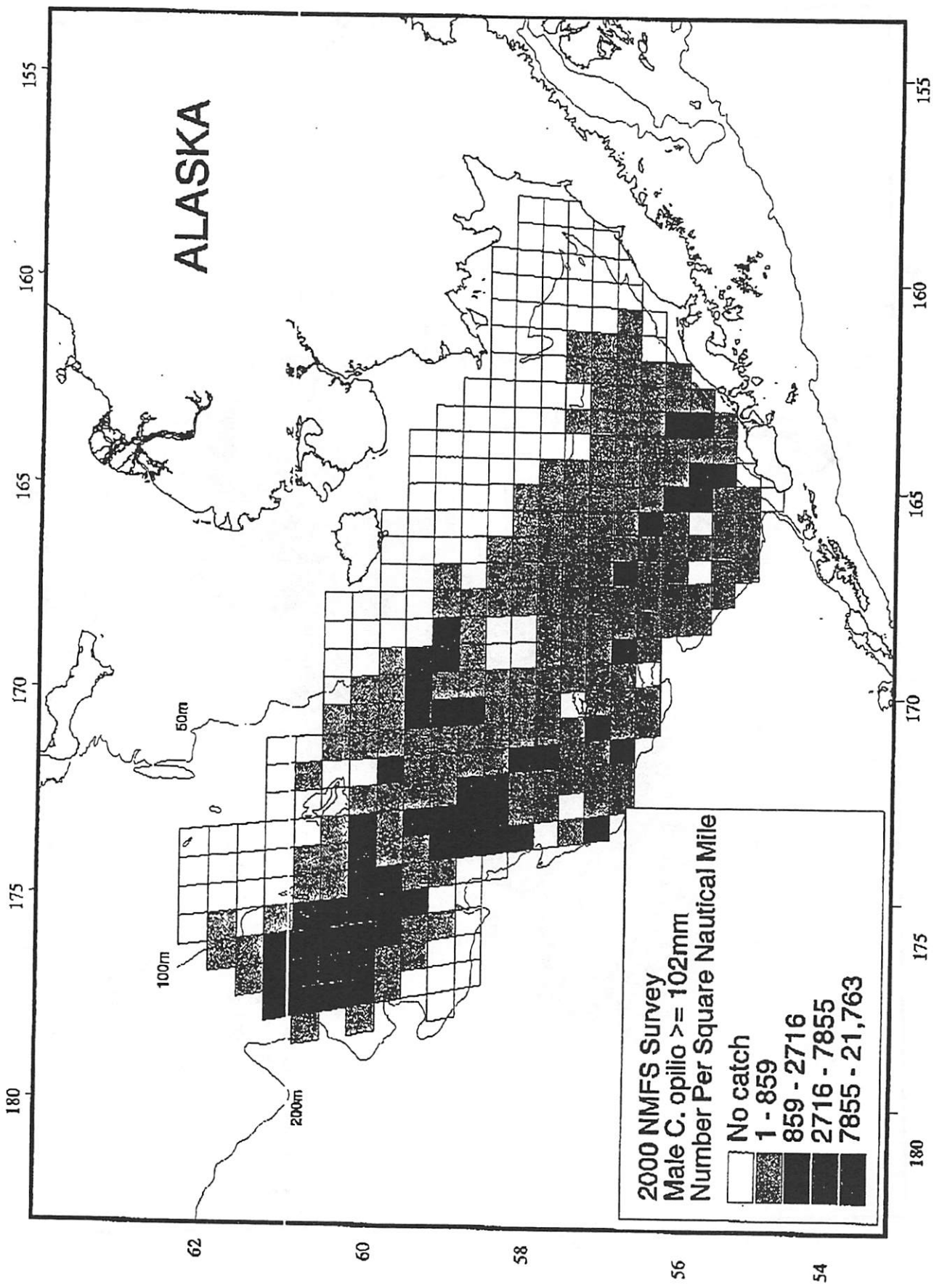
Catch of *C. opilio* crab (numbers) taken incidentally in BSAI trawl fisheries, inside and outside the COBLZ and within area 517, by fishery and year, 1998-2000.

<u>Year</u>	<u>Fishery</u>	<u>Inside COBLZ</u>	<u>Outside COBLZ</u>	<u>Total</u>	<u>Area 517</u>
1998	yellowfin sole	2,057,426	420,984	2,478,410	134,833
	rock sole	56,665	418,710	475,375	32,601
	Pacific cod	49,780	207,891	257,671	56,815
	flathead sole	343,904	321,261	665,165	285,389
	other fisheries	90,737	118,602	209,339	65,085
	TOTAL	<u>2,598,512</u>	<u>1,487,448</u>	<u>4,085,960</u>	<u>574,723</u>
1999	yellowfin sole	378,964	223,709	602,673	51,861
	rock sole	2,294	85,325	87,619	1,029
	Pacific cod	22,390	248,712	271,102	53,822
	flathead sole	254,149	66,107	320,256	55,020
	other fisheries	1,370	77,681	79,051	39,694
	TOTAL	<u>659,167</u>	<u>701,534</u>	<u>1,360,701</u>	<u>201,426</u>
2000	yellowfin sole	1,861,033	513,079	2,374,112	61,140
	rock sole	15,600	132,445	148,045	1,175
	Pacific cod	50,245	84,130	134,375	9,145
	flathead sole	266,340	52,212	318,552	32,638
	other fisheries	16,259	22,685	38,944	13,718
	TOTAL	<u>2,209,477</u>	<u>804,551</u>	<u>3,014,028</u>	<u>117,816</u>









			<u>Opilio/mt</u>	<u>Obs. Hauls</u>	<u>Samples</u>	<u>Sample Wt.</u>
1	5/20/00 ALASKA WARRIOR	BSATRWY	298.079	20	20	6.004
2	5/20/00 ALASKA JURIS	BSATRWY	243.868	15	15	4.332
3	5/20/00 ALASKA SPIRIT	BSATRWY	214.635	23	23	7.539
4	5/27/00 ALASKA SPIRIT	BSATRWY	161.73	23	23	8.055
5	9/30/00 ALASKA SPIRIT	BSATRWY	131.964	9	9	2.629
6	10/21/00 ALASKA WARRIOR	BSATRWY	127.229	9	9	2.527
7	9/30/00 ALASKA RANGER	BSATRWY	120.753	11	10	2.964
8	9/30/00 ALASKA WARRIOR	BSATRWY	120.469	16	16	4.416
9	5/20/00 ALASKA VICTORY	BSATRWY	114.585	15	15	3.606
10	5/27/00 ALASKA VICTORY	BSATRWY	114.32	15	15	3.755
11	5/27/00 ALASKA RANGER	BSATRWY	99.707	16	16	4.212
12	5/13/00 SEAFREEZE ALASKA	BSATRWY	99.457	12	11	2.883
13	10/7/00 ALASKA WARRIOR	BSATRWY	92.983	15	15	4.079
14	5/27/00 ALASKA JURIS	BSATRWY	90.545	16	16	4.245
15	10/7/00 ALASKA VICTORY	BSATRWY	90.222	15	15	4.505
16	7/1/00 ALASKA VICTORY	BSATRWY	89.313	12	12	3.747
17	5/20/00 ALASKA RANGER	BSATRWY	87.548	16	16	4.818
18	10/7/00 ALASKA SPIRIT	BSATRWY	85.317	11	11	3.195
19	11/25/00 ALASKA SPIRIT	BSATRWY	79.329	6	6	1.802
20	6/10/00 ALASKA JURIS	BSATRWY	77.142	15	15	3.402
21	10/7/00 ALASKA RANGER	BSATRWY	76.661	13	13	4.127
22	11/11/00 ALASKA SPIRIT	BSATRWY	69.596	7	7	2.266
23	9/30/00 ALASKA VICTORY	BSATRWY	67.428	13	13	4.395
24	9/30/00 ALASKA JURIS	BSATRWY	67.209	13	13	3.925
25	10/28/00 ALASKA SPIRIT	BSATRWY	66.458	17	17	4.875
26	10/21/00 ALASKA JURIS	BSATRWY	60.587	5	5	1.577
27	11/4/00 ALASKA JURIS	BSATRWY	59.666	4	4	1.216
28	11/11/00 ALASKA WARRIOR	BSATRWY	53.589	10	10	2.69
29	10/14/00 ALASKA JURIS	BSATRWY	53.29	12	12	3.575
30	6/10/00 ALASKA RANGER	BSATRWY	51.589	7	7	2.304
31	10/28/00 ALASKA JURIS	BSATRWY	50.91	13	13	4.505
32	5/6/00 ALASKA JURIS	BSATRWY	50.66	12	12	3.358
33	9/2/00 ALASKA WARRIOR	BSATRWY	50.052	9	9	2.456
34	10/21/00 ALASKA VICTORY	BSATRWY	49.045	7	7	2.32
35	10/21/00 ALASKA RANGER	BSATRWY	48.852	10	10	3.051
36	11/4/00 SEAFISHER	BSATRWY	48.493	6	6	1.98
37	11/11/00 ALASKA JURIS	BSATRWY	48.168	9	9	2.83
38	10/14/00 ALASKA RANGER	BSATRWY	47.983	10	10	3.136
39	11/18/00 ALASKA SPIRIT	BSATRWY	45.9	9	9	2.963
40	10/28/00 ALASKA WARRIOR	BSATRWY	45.73	7	7	2.163
41	10/28/00 ALASKA VICTORY	BSATRWY	45.319	14	14	4.561
42	10/21/00 ALASKA SPIRIT	BSATRWY	45.047	15	15	4.117
43	11/11/00 ALASKA RANGER	BSATRWY	44.849	11	11	3.153
44	10/14/00 ALASKA WARRIOR	BSATRWY	43.968	13	13	4.053
45	5/13/00 ALASKA JURIS	BSATRWY	43.138	12	12	3.14
46	10/7/00 ALASKA JURIS	BSATRWY	41.743	10	10	3.278
47	9/2/00 ALASKA VICTORY	BSATRWY	41.393	7	7	1.822
48	11/18/00 ALASKA VICTORY	BSATRWY	40.77	8	8	2.5
49	8/5/00 ALASKA SPIRIT	BSATRWY	40.67	17	17	4.639
50	6/24/00 ALASKA VICTORY	BSATRWY	40.33	16	16	4.916