

M E M O R A N D U M

TO: Council, SSC and AP Members

FROM: Jim Branson
Executive Director

DATE: March 17, 1982

SUBJECT: Tanner Crab Fishery Management Plan

ACTION REQUIRED

*Review regulatory proposals before the Council and Board.
Discuss future development of the FMP and provide PMT direction.*

BACKGROUND

The Alaska Board of Fisheries is currently reviewing proposed regulatory changes for the 1982-83 Tanner crab fishery. Many of these proposals will have a direct effect on the Tanner Crab FMP. A list of these proposals, the originating authors, and the response by the FMP is provided as Item D-4(a). Proposals that should be of particular interest to the Council are No. 18 which prohibits the use of side-loading pots in the Yakutat area, No. 82 which is the Council's Ad Hoc Crab Pot Storage Committee proposal, No. 85 which establishes a 3.1 inch minimum biological size for C. opilio, and No. 87 which prohibits in-water storage of crab pots around the Pribilofs.

On January 18, 1982 the Ad Hoc Crab Pot Storage Committee met in Seattle to review the current pot storage situation in Bristol Bay and if necessary prepare a pot storage proposal for this meeting. A copy of the Committee's report which outlines their evaluation and proposal was distributed to the Council family in the last Council mailing. The Committee recommends changing the Bristol Bay high seas pot storage area to a new area located within the Bristol Bay Pot Sanctuary. A chartlet illustrating the proposed area is included as Item D-4(b). Among the advantages of the proposed area will be the elimination of conflicts with foreign trawlers and the movement of the storage area to a location closer to the primary fishing grounds, thereby decreasing the fleet's operating costs. This proposal would neither increase enforcement costs nor pose any identifiable biological harm to the crab resources.

In July, 1981 the Council received a PMT report on inconsistencies between State and Federal Tanner crab regulations. In their report, the PMT had recommended amending the FMP to eliminate all inconsistencies as well as modifying the FMP into a multi-year plan. In light of the lengthy process in amending a plan, the Council chose to take no action on the Tanner Crab FMP until results are received regarding the King Crab FMP approach.

With the King Crab FMP still being prepared and the likelihood of additional inconsistencies developing between State and Federal regulations following the Board's shellfish meeting, the PMT recommends initiation of a "housekeeping" amendment that would remove all inconsistencies and bring the FMP back up to date. A summary of the current inconsistencies are provided as Item D-4(c).

Amendment #7 which established new C. bairdi OY's and set C. opilio OY equal to DAH (i.e., TALFF = 0) was published in the Federal Register on September 3, 1981 as a proposed rule. Publication of Amendment #7 as a final rule has been delayed due to the many comments received and the time required to prepare final regulations. The amendment package is currently at the central office of NMFS and publication as a final rule is tentatively being set for late-April, 1982.

An international symposium on the genus Chionoecetes will be conducted on May 4, 5, and 6, 1982 in Anchorage. The symposium, jointly sponsored by the North Pacific Fishery Management Council, National Marine Fisheries Service, the Alaska Department of Fish and Game, and the University of Alaska Sea Grant Program, will consist of technical and workshop sessions which should produce valuable information on Tanner crab biology and its management. The symposium will be held in the Endeavor Room of the Hotel Captain Cook. Session topics include, Early Life History, Reproduction, Tagging, Effects of Harvest, and Population Estimates.

ALASKA BOARD OF FISHERIES TANNER CRAB PROPOSALS

<u>Proposal No.</u>	<u>Topic</u>	<u>Author</u>	<u>FMP Response</u>
15	season change - Yakutat	public	FO
18	prohibit the use of side-loading pots - Yakutat	public	A
34	season change - PWS	public	FO
40	season change - CI	public	FO
41	allow Tanner crab gear on grounds 72 hours prior to season - CI	public	NC
42	district registration - CI	public	NC
77	description of district - Kodiak	staff	A
78	statistical areas established - Chignik	public	NC
79	season change - Chignik/S. Pensinsula	public	FO
80	season change - Aleutians	staff	FO
81	season change - close Tanner crab fishery in Norton Sound	staff	FO
82	change pot storage in S.E. Bering Sea	ours/public	A
83	prohibit storage of gear east of 172°W. longitude	public	A
84	remove guideline harvest ranges in Westward area	staff	NC
85	size limit for <u>C. opilio</u>	staff	A
86	remove district registration requirement in the Westward area	staff	NC
87	prohibit water storage of pots around the Pribilofs	public	A
88	prohibit catcher-processors from catching sublegal crabs	public	--
102	registration - when a vessel can no longer request a change in registration	staff	A
103	gear for Tanner crab	public	--
104	provide for the use of other numbers on pot buoys other than vessel number	public	A

FO = Field Order
A = Amendment
NC = No Change

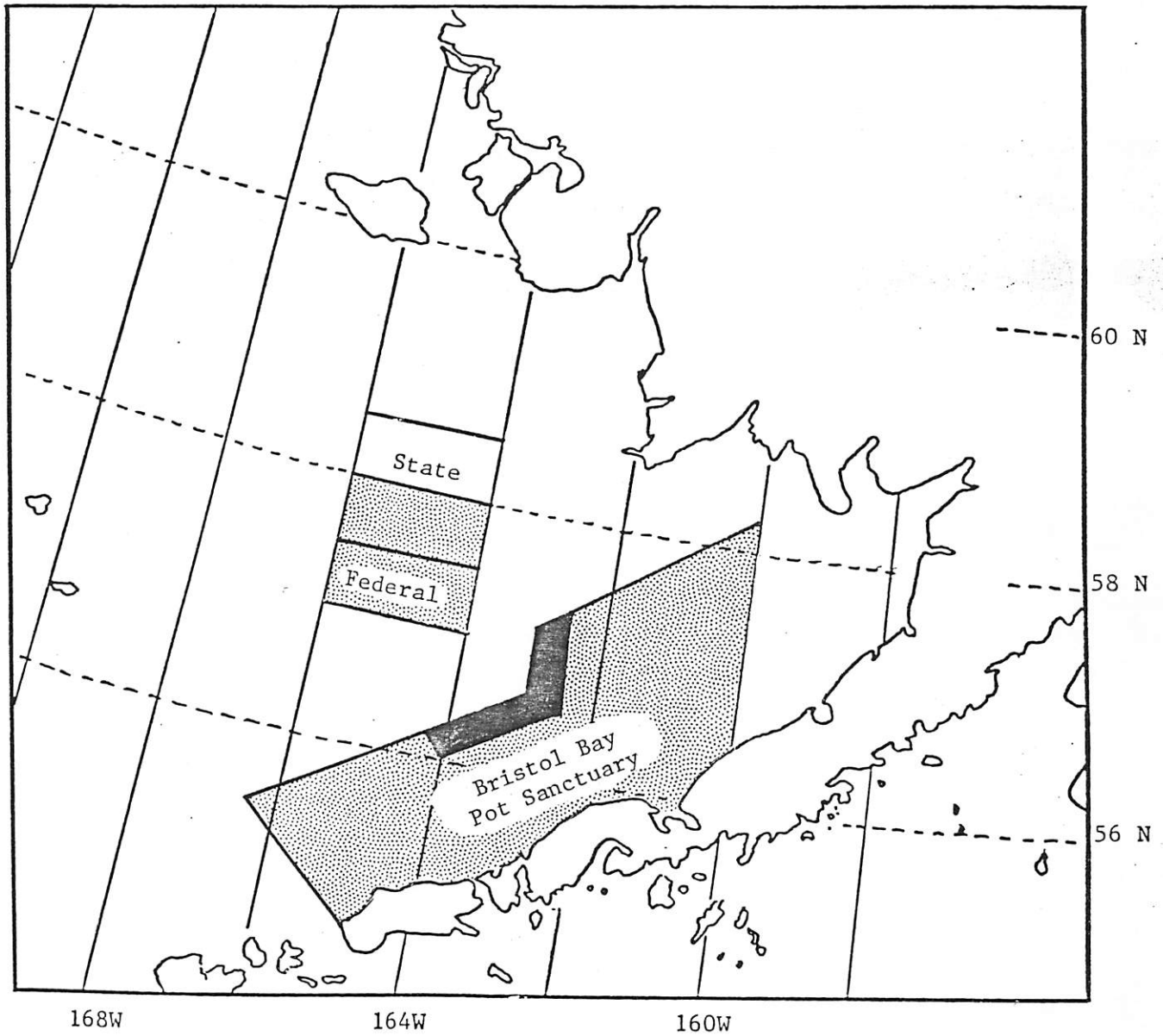


Figure 1. Bristol Bay High Seas King and Tanner Crab Pot Storage Area (State and Federal) and the Proposed Area within the Bristol Bay Pot Sanctuary.

TABLE 1. INCONSISTENCIES BETWEEN TANNER CRAB FISHERY MANAGEMENT PLAN AND STATE REGULATIONS

1. Harvest Guidelines/OY need to be updated.

	<u>AREA</u>	<u>DISTRICT</u>	<u>STATE</u>	<u>FMP</u> (millions of pounds)
S.E.	A	Northern District (Cape Spencer - C. Suckling)	.5 - 3.0	5.5 (for both districts)
		Southern (East of Cape Spencer)	.75 - 2.5	
PWS	E		1.3 - 5.3	7.0
Cook Inlet	H		11.0	5.3
Westward	J	South Peninsula	3.0 - 6.0	6.0
		Chignik	2.0 - 5.0	5.0
		Kodiak	9.0 - 15.0	35.0
		Aleutian	no guideline	2.0
		Bering Sea <u>opilio</u>	no guideline	OY = DAH not to exceed ABC

2. Minor differences in statistical area descriptions

3. Fishing Seasons

	<u>AREA</u>	<u>DISTRICT</u>		<u>STATE</u>		<u>FMP</u>	
				<u>*Opening</u>	<u>Closing</u>	<u>Opening</u>	<u>Closing</u>
S.E.	A	Northern District	was Sept. 15	Dec. 1	May 1	Sept. 1	May 15
		Southern District	was Sept. 15	Feb. 1	May 15	(for both districts)	

*denotes changes made by Board of Fisheries, March 1981

3. Fishing Seasons (continued)

	<u>AREA</u>	<u>DISTRICT</u>		<u>STATE</u>		<u>FMP</u>	
				<u>*Opening</u>	<u>Closing</u>	<u>Opening</u>	<u>Closing</u>
Westward	J	Kodiak	was Jan. 22	Feb. 10	April 30	Jan. 22	April 30
		Chignik	was Nov. 1	Dec. 15	May 15	Nov. 1	May 15
		South Peninsula	was Dec. 1	Dec. 15	May 15	Dec. 1	May 15
		E. Aleutian	was Jan. 15	Feb. 15	June 15	Jan. 15	June 15
		Bering Sea <u>c. bairdi</u>	was Jan. 15	Feb. 15	June 15	Jan. 22	June 15
		<u>c. opilio</u>	was Jan. 15	Feb. 15	*Aug. 1 (<u>opilio</u> only) was Aug. 15		<u>opilio</u> closed by FO
		W. Aleutian remains	Jan. 15 - June 15				

4. Pot Limits

	<u>AREA</u>	<u>DISTRICT</u>	<u>STATE</u>	<u>FMP</u>
Westward	J	Kodiak	250 pot limit	no pot limit
Cook Inlet	H		no pot limit	75 pot limit
S.E.	A		100 pot limit	no pot limit

5. Pot Storage

72 hour period prior to opening of season to allow storage of pots on grounds. It is in the FMP but not in State Regulations. This was an enforcement problem last season.

There is a minor difference in the Bering Sea pot storage area.

*denotes changes made by Board of Fisheries, March 1981

REPORT OF THE KING CRAB DELEGATION
Washington, D.C.
February 9-11, 1982

A delegation of North Pacific Fishery Management Council members and staff, NMFS Central Office and Alaska Region personnel, and representatives from the State of Alaska met February 9-11, 1982 in Washington, D.C. to review the Bering Sea/Aleutian Islands King Crab Fishery Management Plan. Participants and observers at the meeting are listed below:

Jim Branson, NPFMC Executive Director, Meeting Chairman
Clem Tillion, NPFMC Chairman
Don Bevan, NPFMC Member
Don Collinsworth, NPFMC Member and Deputy Commissioner, ADF&G
Nick Szabo, Alaska Board of Fisheries Chairman
Jerry Reeves, NMFS
Phil Chitwood, NMFS
Clem Bribitzer, NMFS
Roland Finch, NMFS
Pat Travers, NOAA General Counsel, Alaska Region
Jay Johnson, NOAA General Counsel
Jim Brennan, NOAA General Counsel
Robert Gorrell, NMFS
Fred Gaffney, ADF&G
Jack Lechner, ADF&G
John Gissberg, State of Alaska, Attorney General's Office
Mike Rubenstein, State of Alaska
Bob Siegel, NMFS
Peter Fricke, NMFS
Donna Turgeon, NMFS
Bob Sullivan, NMFS
Dick Schaeffer, NMFS
Tom Begford, NMFS
Mark Holliday, NMFS
Mary Thompson, NMFS
Steve Davis, NPFMC Staff
Peggy McCalment, NPFMC Staff

The delegation was welcomed by Roland Finch, Acting Director of the Office of Resource Conservation and Management, NMFS. The meeting was chaired by Jim Branson.

The purpose of the meeting was (1) to review the Bering Sea/Aleutian Island King Crab Fishery Management Plan sent to NMFS in December, 1981; (2) to answer questions from the plan review staff about the mechanics of the fishery and the proposed plan; and (3) to agree on the contents of a finished framework document.

Jim Branson reviewed the evolution of the plan, noting that the Council initially thought a plan was unnecessary, but that position met with opposition from the non-Alaskan participants in the fishery. The framework

plan emerged as something that would serve the interest of all participants in the fishery while allowing the State of Alaska to continue day-to-day management.

Steve Davis, Council staff plan coordinator, explained the format of the plan and contents of the attached appendices. He stressed the fact that the plan was designed to respond rapidly to changes in the fishery without the need for annual amendments.

Explanation of State Management System

Jack Lechner described the system developed by the State of Alaska for managing the king crab fishery which has enabled the State to increase exploitation rates while learning more about the species. Mr. Lechner explained how the exploitation rate is derived from population assessments made through State and NMFS surveys and how harvest guidelines and regulations are formulated. The State tabulates catches daily and publishes catch statistics weekly. Tag recovery programs are used to estimate the exploitation rates on particular stocks and CPUE data is used to compare trends of previous years' fisheries.

Nick Szabo and John Gissberg explained the State Board of Fisheries process for developing and implementing regulations under the Alaska Administrative Procedures Act. Any proposed change in regulations must be noticed to the public at least 30 days before Board action; any Board action does not become effective until 30 days after approval. The Board solicits proposals for changes in regulations from the public and its 56 local Fish and Game Advisory Committees and distributes all proposals to the public for review. Don Collinsworth noted that the State spends about \$1 million annually to operate the advisory committee system and over 700 persons serve on these committees statewide.

Although the Alaska Administrative Procedures Act does not require written findings following adoption of a regulation, the Board does publish them when an advisory committee's proposal is not accepted.

Nick Szabo explained that the Board's exchange with the public is the most extensive of any sector of the State system. The public has three opportunities to review every proposal before it is acted upon, and the State attempts to prepare written findings for all controversial issues. In addition, the State has agreed to publish a written finding for any regulation relating to the King Crab FMP, even though it may not be required by law.

Jim Branson noted that the Council shares in the Board's public process for fisheries of mutual interest, i.e., king and Tanner crab, troll salmon, and herring. The Board will hold its first public hearing outside the State of Alaska in March 1982 to accept testimony on State proposals for the 1982 king crab fishery. John Gissberg explained further that the Seattle-based fleet has always had the opportunity to submit proposals and that the Board will attempt to provide written findings for any of their proposals which are either adopted or rejected.

Clem Bribitzer asked if in-season adjustments are subject to the Administrative Procedures Act. John Gissberg explained that the APA allows for

emergency orders, through the Fish and Game Commissioner, to open and close seasons, adjust the size of the fishery, etc.

Delegation of Management Authority to the State of Alaska Under the Framework Concept

Jim Brennan, Deputy General Counsel for NOAA, said that the General Counsel's office feels that delegation of day-to-day management authority to the State is technically possible under the framework plan. There were some areas, however, which the General Counsel's office felt should be strengthened to withstand judicial review. He said that the General Counsel's office is pleased with the biological basis of the plan. After hearing Nick Szabo's and John Gissberg's explanation of the State regulatory process, he said he was comfortable that the public has ample opportunity to participate. Mr. Brennan suggested that the Board publish its agendas in the Federal Register to comply with Federal noticing requirements.

It was the consensus of the group that there are no major legal or policy considerations preventing delegation of day-to-day management authority to the State of Alaska.

Optimum Yield

Bob Siegel said that he was unsure how the draft FMP would comply with EO 12291 as currently written. He suggested that if the Council set a range for OY, (for example, 50-100 million pounds) and prepared a regulatory impact analysis for the upper and lower ends of the range and several points between, the FMP should comply with the Executive Order. Bob Sullivan added that an FMP without specified ranges creates an arbitrary, unclear regulatory authority.

Don Collinworth asked if using a formula to determine OY might be more advantageous than setting a range, as a formula could allow more easily for natural fluctuations in the stock. Jay Johnson said that OMB needs to be convinced that the Council has looked at the social and economic implications of its regulations. They want to be assured that fishermen will get the best deal possible considering economic, social, and other factors in relation to the condition of the resource.

Discussion continued on the determination of OY under the regulatory process of the State compared to Federal entities. Jay Johnson pointed out that the Board of Fisheries process looks at biological, ecological, economic, and social factors. The difference is in approach rather than procedure. The Board relies heavily on oral testimony whereas Federal requirements call for specific, written formats. The Board process does take into account the underlying factors required by NEPA. Mr. Johnson said that one thing that is missing in the FMP is the specified objective upon which the State bases its management regime, such as maximum dollar efficiency with minimum effort, maximum yield consistent with the biological needs of the resource, etc. OMB must be convinced that the State's management regime is not based totally on economics.

Peter Fricke suggested that the document include a set of criteria and resultant triggering mechanisms for examining the effects of certain regulations on fishermen in order to show that the basis for regulation is rational and fair.

Clem Bribitzer said there was probably enough socioeconomic data available in the Board's record of oral testimony to analyze the regulatory impacts to comply with the Regulatory Flexibility Act. He believed the Board and Council should provide more written justification for the effects of their regulations.

Don Bevan countered that while the MFCMA generally applies regulations to fisheries which are out of control or are trying something new on the fishing community, the same management system which has been in place for over 20 years in this fishery will remain in effect.

A workgroup assigned to further explore the derivation of optimum yield from ABC suggested that for areas where spawner-recruitment relationship cannot be determined, the OY should equal the ABC.

In response to the apparent need for an OY range in areas where increased biological information allows the determination of a spawner-recruitment relationship, the workgroup proposed using the estimated yields table on page 13 of the FMP to demonstrate the relationship of size limit and exploitation rate. Using the table, the upper limit of the OY range would equal the ABC, this being the yield obtained by using the highest exploitation rate applied to the smallest size limit while still providing maximum reproductive potential. The lower limit of the OY range would be the yield obtained from the lowest exploitation rate applied to the largest size limit. Although this range is quite large, it seemed to satisfy the concerns of the Central Office staff while still maintaining the plan's flexibility. Jay Johnson stressed the need for clearer explanation of how size limit changes are determined in the process.

The question of including subsistence requirements in the determination of OY was discussed at great length. It was concluded that the provisions of the plan do not apply to the subsistence or recreational fisheries. The group agreed that a sentence should be added to the section on subsistence, stating that the subsistence catch is negligible compared to the commercial fishery and no impact is anticipated.

The group agreed that the history of the fishery indicates that an exploitation rate of .4 to .6 has maintained the fecundity rate desired and that OY will be determined within those exploitation rates.

Management Unit

Clem Tillion explained that the management unit for the FMP contains only the Bering Sea and Aleutian Islands areas because those stocks are harvested primarily in the FCZ. Those westward stocks do not contribute to the Kodiak or Cook Inlet fisheries in any way.

Bob Gorrell outlined the issues raised for the existing management unit:

- Management unit (i.e., reasons for excluding Kodiak and Cook Inlet) needs better justification in terms of National Standard 3, part 2, National Standard 4, and the minority report.

- Expanded language on conservation and economic concerns may strengthen the case for limiting the management unit to the Bering Sea and Aleutians.
- Management unit is not defined consistently throughout the document.

The argument for the management unit presented in the FMP needs to be made stronger to survive judicial review.

Framework Nature

Major discussion of this aspect of the FMP is contained in the section, "Delegation of Management Authority to the State of Alaska."

Bob Siegel suggested that the RIR include several paragraphs of economic justification for the plan itself. This might include its applicability as an example of the "New Federalism", a discussion of the various dollar values of catches at several catch levels, and analysis of the impacts of the plan, if any, on vessels now in the fishery.

Registration Areas

Bob Gorrell said there was concern over the lack of specificity in how an individual applies for a specific area. Don Collinsworth explained that when a fisherman registers for a specific area, he "assigns" his own fishing unit. They pick it, they fish it. By decreasing effort in a given unit, the season can be spread out to make better use of smaller stocks or groups of stocks.

Nick Szabo commented that the Board rarely initiates regulatory changes on its own, but usually reacts to ADF&G or public proposals. He said that in the mid 1960's the Board repealed exclusive registration areas for the king crab fishery. It was the North Pacific Fishing Vessel Owners Association that proposed that the Board reinstitute exclusive registration in the king crab fishery, which was done, based on their request, in 1968.

The group agreed that the section on registration areas should be expanded to include a discussion of the "mechanical" advantages of registration in determining day-to-day management actions.

It was the consensus of the group that a list of criteria for designating exclusive and non-exclusive registration areas be included in the FMP, with additional explanation of districts within registration areas.

In reviewing the workgroup's proposed changes to this section, it was suggested that the FMP state that the Board will consider social and economic factors which may be involved before changing registration areas.

Fishing Seasons

Bob Gorrell cited potential problems with this section relating to National Standards 4 and 5. References in the document to "locally-based fleets" and "small vessels" raise real questions with the National Standards and should be eliminated whenever possible.

Other

Mark Holliday explained that the Paperwork Reduction Act calls for reduced information collection from the public. He said if the Council wishes to undertake any new data collection efforts, it must be approved through NOAA and OMB. He recommended that the Council not attempt to federalize State of Alaska reporting requirements, but state in the plan that Alaska's reporting requirements are consistent with the FMP.

Procedures for Plan Implementation

On pages 29-31 of the FMP, protocol for the roles of the Federal government (through the NMFS Regional Office and NPFMC) and the State of Alaska is presented in eight steps. Bob Gorrell cited several minor concerns with the protocol. He suggested that clarification be added to items 5 and 6, which describe the Regional Director's and Secretary's authority, to explain that the protocol applies in all instances, not only in emergency situations. Mr. Gorrell also suggested a change in the order of the eight steps, changing the existing number 4 to number 6; thus, existing number 5 would become number 4, and so on. Mr. Gorrell suggested that the language in this section be expanded to include the types of breach of agreement between the State and Council that would trigger the Secretary's direct involvement. He also suggested that a sentence be added on page 29 to reaffirm that the first set of implementing regulations for the framework will require full Secretarial review and approval.

Summary

Jim Branson said he felt that the deficiencies initially noted by the plan review staff had been alleviated by explanation and discussion of the management system and will be further helped by the addition of clarifying and/or expanded language in the critical areas. It was the consensus of the group that the changes made to the text of the plan do not affect any substantive portions of the FMP or reflect any changes in policy.

Roland Finch made the following observations of the review:

1. The RIR and the changes suggested are the responsibility of the Council and the NMFS Regional Office.
2. Two issues may still need more clarification, justification of the management unit and registration areas. He suggested that a paragraph be added saying that the Council initially considered a wider area for the management unit, but rejected the larger unit for specific, stated reasons.
3. The first set of regulations to implement the framework must be fairly comprehensive, somewhat a restatement of the plan, if they are to survive OMB review.
4. Language setting forth the factors considered in designating exclusive and non-exclusive registration areas should be further strengthened.
5. Justification for selecting one optimum yield over another needs further expansion -- a stated objective is needed.

Summary of Final Session with Assistant Administrator

Bill Gordon joined the group on Thursday morning, February 11, to discuss the NMFS position on the framework FMP and its approvability. Jim Branson reviewed the areas of concern needing additional or clarifying language and explained that the FMP has not changed in objective or policy. The group had:

1. Further developed guidelines for deriving OY from ABC;
2. Clarified and further justified the fishery management unit.
3. Expanded criteria for designation of exclusive and non-exclusive registration areas;
4. Agreed upon other language changes dealing with seasons, reporting requirements, etc., as suggested by the Plan Review staff.

Bill Gordon said that NMFS feels there can be mutual benefits from the King Crab Plan, primarily that it will be the first major step toward state/federal fisheries management systems. He urged the Council to pay close attention to the socioeconomic factors of the fishery, particularly in these next few, tough years for the U.S. fishing industry, and encouraged expansion of the socioeconomic data base wherever possible to achieve more responsive management for all fisheries of the North Pacific.



**North Pacific
Fishing Vessel
Owners' Association**

Proposal #18

"Prohibit the use of sideloaded king and tanner crab pots in the Yakutat area."

The Association opposes this proposal. It believes the real purpose of this proposal is to keep non-Yakutat fishermen out of the area.

There has been no data to show that there is a high incidental catch of halibut in the Yakutat area that is jeopardizing the stocks. Nor is there data which demonstrate high incidental catches are attributable to the side-entry pots used by the crab fishermen. Even if such data were available, NPFVOA believes there is an obligation to consider less drastic and economically disruptive means of reducing incidental catches, such as the installation of tanner boards, than imposing an outright ban on side-entry pots.

Before the Board of Fisheries adopts this proposal, it must answer the following questions:

- (1) Is there a high incidental catch of halibut in the Yakutat area?
- (2) Is this catch jeopardizing the halibut stocks?
- (3) Is this catch attributable to side-entry crab pots?
- (4) What is an acceptable level of incidental catch by side-entry pots?
- (5) Can this level be achieved by modification of the side-entry gear?
- (6) What would be the financial cost to fishermen (individually and as a group) to modify the side-entry pots?
- (7) Are there other methods of reducing incidental catches by side-entry pots?
- (8) What are the costs (financial and economic) of these methods?
- (9) If side-entry pots are to be prohibited, will this ban affect the productivity

of the tanner crab and king crab fisheries?

- (10) Does this loss in productivity and its socioeconomic effects on the local community and fishing industry outweigh the value of preserving the halibut stocks?

To be responsive and responsible to the fishing industry and society, NPFVOA believes that it is necessary for the Board to answer these and other questions posed by a prohibition on side-entry pots in the Yakutat area.

Apparently, the information being used to justify this proposal is a report which compares halibut and crab catches in side-entry and top-entry crab pots, and in side-entry pots with and without tanner boards. The report was prepared by the International Pacific Halibut Commission (IPHC) and the Alaska Department of Fish and Game for the North Pacific Fishery Management Council.¹ As will be pointed out, the Council Report does not back up the claims of the proposal makers. Nor does it respond to most of those questions which NPFVOA posed above.

The Council Study states that the International Pacific Halibut Commission estimates that "1.6 and 2.0 million pounds of halibut were caught in the king and tanner crab fisheries, respectively, in the Gulf of Alaska during the 1979/1980 season."² However, the study also notes that "Information on the incidental catch of halibut in the crab fishery is lacking...." (emphasis added).³

Although the study was conducted in the Yakutat area (see Table 6 of the Appendix for Fishing locations), nowhere does it state the extent of the incidental catch of halibut in this area. The Board should also be aware that the Council Study was not conducted to explore the incidental catch of halibut in the Yakutat area by crab gear but was carried out for the following objectives:

- (1) Test the hypothesis that top-entry crab pots catch fewer halibut (per unit soak time) than side-entry (rectangular) pots.
- (2) Test the effectiveness of the two pot types in catching crab.
- (3) Test the hypothesis that "tanner boards" reduce the catch of halibut in side-entry pots.⁴

Furthermore, one of the three tasks of the Council Study was to "[a]nalyze data from the experiment and report their interpretation relative to objectives."⁵

The preparers of the study also recognized that data on incidental catches of halibut were necessary. Recommendation 2 of the study partially declares that "An observer program should be conducted to... establish rates of incidence in the commercial fishery." (emphasis added)⁶

NPFVOA did an analysis of the data gathered during the course of Experiment I of the Council Study, which compared the catch of halibut and crab in side-entry and top-entry pots. The Association came up with the following statistics. (Note: Due to the poor quality of reproduction of NPFVOA's copy of the Council Study, the figures and percentages are based on 195 pots fished, rather than the 198 pots used in the study.)

Pots with no halibut or crab	66 (33.8%)
Pots with no halibut or one or more crab	48 (24.6%)
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Total pots catching no halibut	114 (58.4%)
Pots with one or more halibut and no crab	58 (29.7%)
Pots with halibut and crab	23 (11.9%)
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Total pots catching halibut	81 (41.6%)

Table 1 of the Appendix also shows that when 15 or more crabs were caught in a pot, either no halibut or at the most two halibut were also caught. Of the 18 pots where there were 15 or more crabs caught, 13 pots (72.2%) had no halibut, 3 pots (16.6%) had only one halibut, and 2 pots (11.2%) had two halibut.

These figures might indicate that where there are large quantities of crab, there are few halibut to be caught. It has been the experience of the Association's members that there is no extensive intermixing between halibut and crab except during migratory periods. We suggest that the Board might wish to conduct further inquiries into the distribution of crab relative to halibut during tanner crab and king crab seasons.

One finding of the study was that tanner boards reduced the catch of halibut in side-entry pots by 63%.⁷ "Perhaps more importantly," the study noted, "the use of 'tanner boards' almost eliminated the catch of halibut over 90 cm in length."⁸

Communication between NPFVOA and White Metal Fabricating Inc. of Seattle, Washington has resulted in the following price quotations for tanner boards and 300-500 pound top-entry crab pots (pyramid pots):

\$1.70	Wooden Tanner Boards
\$9.60	Plastic Tanner Boards
\$210.00	Pyramid Pot

If a fisherman who fished 200 side-entry pots were to install tanner boards, his costs would be \$340 (wood) or \$1920 (plastic). To change to a top-entry pyramid pot would be a \$42,000 investment.



**North Pacific
Fishing Vessel
Owners' Association**

Proposal #59

"Change the [king crab] season [for
Dutch Harbor]."

The Association will support this proposal if the processors are able to produce data which show increased recovery in Bristol Bay by moving the season opening to a later date. (See Proposal #65.)

The Council Report recognizes the high financial costs that gear changes would entail. One of its recommendations was that "[f]urther gear research should be conducted to determine if side-entry pots can be modified to significantly reduce halibut loss with little cost."⁹

It has been the experience of NPFVOA's members that fishing pyramid pots for king crab has not been very successful. Thus, the Board should consider the socioeconomic impact on the fishing industry if side-entry pots are banned. In prohibiting side-entry pots to reduce or eliminate the incidental catch of halibut, the Board may be adversely affecting those dependent on king crab, a sphere of people much larger than those whose livelihood is tied to the halibut fishery.

¹ "A comparison of halibut and crab catches in: (1) side-entry and top-entry crab pots; and (2) side-entry crab pots with and without tanner boards," Draft Final Report on North Pacific Fishery Management Council Contract No. 81-3, November 20, 1980. Hereinafter called "Council Report" or "Council Study."

² Council Report page 7

³ Council Report page 7

⁴ Council Report page 8

⁵ Council Report page 8

⁶ Council Report page 2

⁷ Council Report page 2

⁸ Council Report page 2

⁹ Council Report page 2



**North Pacific
Fishing Vessel
Owners' Association**

Proposal #60

"Change the Dutch Harbor king crab guideline harvest levels."

The "Joint Statement of Principles" requires the Board to "make readily available in written form...for...at least thirty (30) days [before taking final action], the reports and data received by BOF upon which the proposed regulation is based...." Where are these reports and data?



**North Pacific
Fishing Vessel
Owners' Association**

Proposal #61

"Eliminate water storage of crab pots
in Dutch Harbor statistical area O."

The makers of this proposal have failed to provide statistics which show the extent of the alleged conflicts. If conflicts are widespread, the Association believes the Board should encourage the affected fishermen to resolve the problem among themselves rather than institute a total ban on storing gear in the water.



**North Pacific
Fishing Vessel
Owners' Association**

Proposal #63

"Make the Bristol Bay area a nonexclusive registration area."

The Association supports this proposal.

Last year, the Board and North Pacific Fishery Management Council agreed to the "Joint Statement of Principles" which states that the Bering Sea and Aleutian Islands king crab fisheries are to be managed in accordance with National Standards of the Magnuson Fishery Conservation and Management Act (MFCMA) and the "Bering Sea/Aleutian Island King Crab Fishery Management Framework." The Framework sets out five criteria in determining whether a registration area should be exclusive or non-exclusive:

- (1) the desire by the public to protect industrial and community investments;
- (2) the ability to properly manage the fishery;
- (3) providing fleets a reasonable opportunity to participate in the fishery;
- (4) promoting the most efficient utilization of vessels and gear; and
- (5) availability of similar management measures which would limit overall fishing effort.

Exclusive areas were designed to protect the local fleets and therefore, are not only an unlawful exercise of a state's police power, but also violations of National Standard 4 of MFCMA (which prohibits discrimination) and National Standard 5 (which mandates that a management measure shall not have economic allocation as its sole purpose).

Providing fleets a reasonable opportunity to participate in the fishery is an indirect way of stating that the designation of an area as "exclusive" is an allocation matter. National Standard 4 of the MFCMA requires allocations be "fair and equitable" and "reasonably calculated to promote conservation." However, setting aside Bristol Bay as an exclusive area in order to protect the Dutch Harbor area from large vessels does not comply with this standard.



**North Pacific
Fishing Vessel
Owners' Association**

Proposal #62

"Change the season closing date [for Adak]."

The Association supports this proposal for the following reasons:

- (1) A later closure period will allow boats to fish tanner and king crab simultaneously.
- (2) It is felt that a better concentration of crab may be found later in the spring in the Adak Area, resulting in lower operating costs for vessels and processors.
- (3) Weather conditions would not be any different than those already experienced since the opening date is not proposed to be changed.
- (4) This proposed change should not impose any problem with regard to molting conditions. If there were molting problems, the season could be closed by emergency order and then reopened when the condition of the crab improve.
- (5) Since the decline of the Adak fishery in the late 1970's, little is known about the red and brown king crab stocks in this statistical area: Adak is not covered by the National Marine Fisheries Service's trawl survey which assesses king crab abundances or by an Alaska Department of Fish and Game research program. Exploratory fishing could take place if the season on male red and brown king crab were extended past the present February 15th closing date, and would result in the collection of much-needed information on the abundance and life cycle of these stocks.

The Association supports the placing of observers aboard harvesting vessels to alleviate enforcement concerns.

Designating an area as "exclusive" is not the most efficient use of vessels and gear. It protects inefficient vessels from competition and has led to the buildup of large fleets in each exclusive area. Consequently, this management measure violates National Standard 5 of the MFCMA (which requires, where practicable, the promotion of efficiency in the use of fishery resources).

Quotas coupled with size and gear restrictions are adequate management measures which serve the purpose of limiting overall effort. Exclusive areas are not needed to limit overall effort.

The Association does not oppose area registration if it is to be used only to ascertain the number of vessels fishing in an area and to gather information on stocks.



**North Pacific
Fishing Vessel
Owners' Association**

Proposal #65

"Change the opening date for the Bristol Bay king crab season."

The Association supports a September 15th opening date for red and blue king crab. If the processors can produce data that clearly show that a later season opening will result in increased recovery rates, the Association would support an opening date no later than October 1st. (Such data must span at least five years in order to establish a trend.) An opening date later than October 1st could jeopardize the safety of vessels and crew.



**North Pacific
Fishing Vessel
Owners' Association**

Proposal #66

"Change the season [for king crab in
Bristol Bay]."

The Association supports Option 2 (which would allow a year-round fishery for brown crab). Little is known about the brown king crab. A year-round fishery would enable fishery managers to acquire more information on the abundance, distribution and life cycle of this specie. The Association supports an observer program aboard harvesting vessels to alleviate enforcement concerns.

For the Association position on Option 1 (an October 1st season opening for red and blue king crab), see its comments on Proposal #65.



**North Pacific
Fishing Vessel
Owners' Association**

Proposal #67

"Change the Bristol Bay king crab
guideline harvest level."

The Association opposes the proposed harvest guideline level. In setting the upper end of the harvest range, the Board did not follow the procedures set out in the "Bering Sea/Aleutian Island King Crab Fishery Management Framework." If these procedures were followed, a .7 exploitation rate would be used, resulting in an upper limit of 40 million pounds. (See the materials prepared by Dr. Jerry Reeves of the National Marine Fisheries Service.)

The "Joint Statement of Principles" requires the Board to "make readily available in written form...for...at least thirty (30) days [before taking final action], the reports and data received by the BOF upon which the proposed regulation is based...." Where are these reports and data?



**North Pacific
Fishing Vessel
Owners' Association**

Proposal #68

"Change the [Bristol Bay king crab] pot storage area or allow random inwater storage of pots."

The Association supports Option 2 (random storage).

In 1981, the Board agreed to manage the Bering Sea and Aleutian Islands king crab fisheries in accordance with the "Bering Sea/Aleutian Island King Crab Fishery Management Framework." This document sets out five criteria for establishing gear storage regulations:

- (1) the biological impacts of storing gear at sea;
- (2) the enforcement costs of determining whether fishing gear stored at sea is in a non-fishing condition;
- (3) the costs borne by the fleet to store gear;
- (4) availability of on-land or at-sea storage areas; and
- (5) possible gear conflicts.

Scientists have readily admitted that there is no data which demonstrates that at-sea storage of gear in a non-fishing condition has a negative biological impact on crab stocks.

Most fishermen store their gear in a non-fishing condition; therefore, the costs of sending enforcement officers to pull pots probably outweighs the benefits of such activities. In addition, the vessel tank inspection requirement eliminates any incentive to store pots in a fishing condition.

Open storage, as evidenced by a table (copy attached) in the North Pacific Fishery Management Council's King Crab Plan of September 15, 1980, is the least costly of all pot storage options to the fleet. The costs of open (random) storage are estimated at \$640,800 while the costs of storage in a designated high seas area are \$1,214,388. Storage in less than 25 fathoms costs \$1,618,200 and on-land storage costs run \$3,477,600. Open storage also is consistent with the national policy of conserving fuel: the Council estimates that this storage option consumes 210,000 gallons of fuel while the other alternatives require 3 to 9 times this amount of fuel. In addition, if the time between the close of tanner crab fisheries and the opening of the king crab fisheries is short, it makes no sense to impose

heavy financial burdens on the fleet.

There is not enough on-land storage to accommodate the pots fished in Bristol Bay and there are not enough docks and machinery to quickly and efficiently transfer pots into and out of on-land storage facilities.

The present at-sea storage area has not protected pots from foreign trawling; therefore, many fishermen have chosen not to put their pots in the present designated at-sea storage area. Dispersal of gear throughout the Bering Sea (and especially in areas where foreign trawlers are not operating) would lessen the potential for gear conflict.

Coupled with open storage would be the requirement that gear must be stored with bait and bait cans removed, and doors locked open.

If Option 2 is rejected, the Association would support Option 1 (the Council Committee's new high seas pot storage area).

Table 25 A comparison of estimated costs of various types of gear storage for the time period between the end of the Tanner crab fishery and the beginning of the king crab fishery in the southeastern Bering Sea.

	<u>DRY LAND STORAGE</u>	<u>LESS THAN 25 FATHOM</u>	<u>DESIGNATED HIGH SEA STORAGE AREA</u>	<u>RANDOM STORAGE</u>
FUEL - GALLONS	1,944,000 gal	972,000 gal	651,240 gal.	210,000 gal
Cost (\$1.20/gal.) (per pot)	\$2,332,800 (37)	\$1,166,400 (18.50)	\$ 781,488 (12.40)	\$252,000 (4)
FOOD	\$ 126,000	\$ 63,000	\$ 44,100	0
STORAGE/POT	630,000	0	0	00
TANK INSPECTION	\$ 388,800	\$ 388,800	\$ 388,800	\$388,800
TOTAL COST	\$3,477,600	\$1,618,200	\$1,214,388	\$640,800
TOTAL COST/POT	\$ 55.00	\$ 25.70	\$ 19.28	\$ 10.17

ASSUMPTIONS

75% of 240 boats fish Tanner crab = 180 boats
 Average 350 pots each
 20 hours running from grounds to shore
 10 hours running from grounds to 25F
 6.7 hours running from grounds to designated storage area
 3 round trips necessary beginning
 3 round trips necessary end
 1 round trip for tank inspection
 fuel \$1.20/gallon
 45 gallons/hour
 Food = \$100./day

Source: "Western Alaska King Crab
 Draft Fishery Management
 Plan" prepared by the
 North Pacific Fishery
 Management Council
 (September 15, 1980)

**North Pacific
Fishing Vessel
Owners' Association**

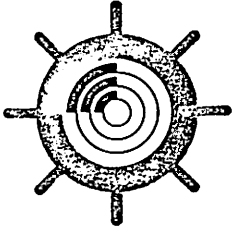


Proposal #70

"Change the [king crab] seasons for
the Pribilof district."

The Association supports Option 2 (a year-round fishery on brown crab). Due to the lack of information on brown crab, there is no quota on this specie in the Pribilof district. A year-round exploratory fishery would result in the acquisition of much needed information on the distribution, abundance and life cycle of this crab. The Association supports the placement of observers aboard harvesting vessels to alleviate enforcement concerns.

For the Association position on Option 1 (an October 5th opening date for the red king crab fishery), see Proposal #65.



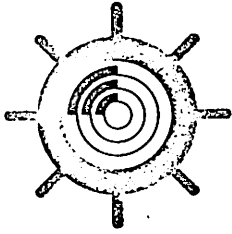
**North Pacific
Fishing Vessel
Owners' Association**

Proposal #71

"Change the [king crab] season for the Northern District."

The Association supports this proposal for the following reasons:

- (1) When male red and blue king crab have been harvested in the Northern district in mid-July (the present opening date) the shell condition has been soft, indicating that molting occurred just prior to the season opening. Opening this fishery on May 1st when the ice is just moving out would enable harvesters to take red and blue crab before molting has occurred.
- (2) A May 1st opening date would provide for an exploratory fishery and enable fishery managers to acquire needed information on the abundances and life cycles of these stocks. When data from the fishery show that molting has begun, the fishery would be closed down and reopened when crab are again in good condition.
- (3) An earlier fishery than is presently allowed would also spread out fishing effort by diverting vessels from the tanner crab fisheries.



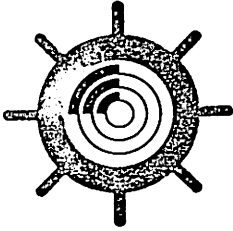
**North Pacific
Fishing Vessel
Owners' Association**

Proposal #72

"Close the Norton Sound section [to
king crab fishing]."

The Association opposes this proposal.

There are no statistics presented which support this proposal.



**North Pacific
Fishing Vessel
Owners' Association**

Proposal #73

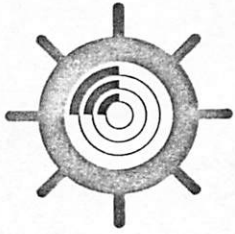
"Close the summer [king crab] season
in the Norton Sound section."

The Association opposes this proposal.

Where are the statistics that show a four-year decline in the crab population?

Where is the information to show that recruitment is low and it will be two years before "any significant recruitment becomes available"?

Where is the information to substantiate the implied claim that the commercial harvest has led to a "nonexistent" subsistence catch?

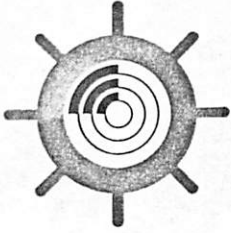


North Pacific
Fishing Vessel
Owners' Association

Proposal #74

"Change the Bering Sea king crab guideline harvest levels."

The "Joint Statement of Principles" requires the Board to "make readily available in written form...for ...at least thirty (30) days [before taking final action], the reports and data received by BOF upon which the proposed regulation is based...." Where are these reports and data?



North Pacific
Fishing Vessel
Owners' Association

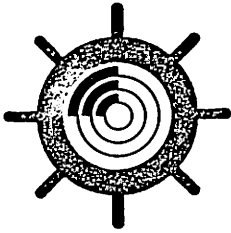
Proposal #75

"Establish harvest guidelines [for king crab] in the Norton Sound section of the Northern District."

What are the different management strategies under consideration?

Why was the crab population smaller than anticipated? What is the outlook for this fishery?

Where is the data that indicate the inshore subsistence fishery needs protection?



**North Pacific
Fishing Vessel
Owners' Association**

Proposal #76

"Change the size limit of male red and brown [king] crab in the Pribilof district of the Bering Sea, area Q."

The Association opposes this proposal.

Where are the data to substantiate that taking 7-1/2 inch crab is better than 7 inch? Why isn't the size limit just left at 6-1/2 inches? In "An Analysis of Size Limitation for the Alaska Red King Crab" (presented to the Board in 1980), it is concluded that

"Application of split seasons and different size limits may increase sorting mortality and generate unnecessary fuel costs. Similar yield could be achieved by slight increases in fishing rates at the lower size limits while reducing energy requirements and sorting mortality."

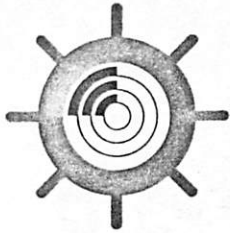
The study also concludes that

"Greater annual yield stability can be achieved with lower size limits [than presently allowed] by increasing the number of "buffering" year classes involved in the fishery if appropriate fishing rates are applied"

and

"A size limit of 6.25 inches with a 0.6 fishing rate is proposed for all areas."

In view of this study, why is a second season on 7-1/2 inch or even 7 inch crab considered?



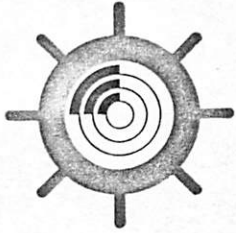
North Pacific
Fishing Vessel
Owners' Association

Proposal #78

"Establish Chignik as an exclusive registration area [for tanner crab]."

The Association opposes this proposal.

Adoption of this proposal would be in violation of National Standards 4 and 5 of the Magnuson Fishery Conservation and Management Act. (Association's comments on Proposal #63 explain why exclusive area registration violates these standards.)

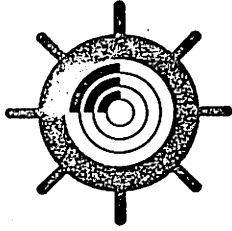


**North Pacific
Fishing Vessel
Owners' Association**

Proposal #80

"Open the Western Aleutian district Tanner crab season simultaneous to the Adak king crab season."

The Association supports this proposal. It would cut down on vessel operating costs.

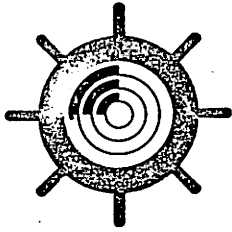


**North Pacific
Fishing Vessel
Owners' Association**

Proposal #81

"Close the Norton Sound section to the taking of tanner crab."

The Association needs more information on this proposal. Where are the data which show that there is covert fishing on the king crab resources during the tanner crab fishery?

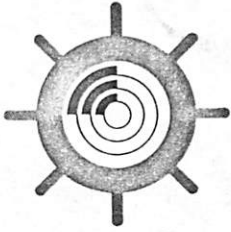


**North Pacific
Fishing Vessel
Owners' Association**

Proposal #82

"Change the Southeastern subdistrict
[tanner crab] pot storage area or allow
random in-water storage of pots."

Please see the Association's comments on Proposal #68.

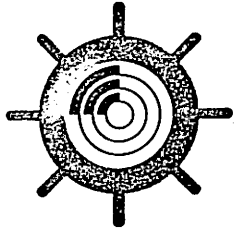


**North Pacific
Fishing Vessel
Owners' Association**

Proposal #83

"Prohibit storage of [tanner crab] pots
in the water east of 172° W. longitude."

The Association opposes this proposal. The Association suggests that a meeting of the conflicting groups be held to find a solution that is acceptable to all.

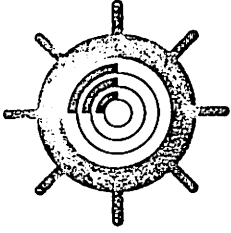


**North Pacific
Fishing Vessel
Owners' Association**

Proposal #85

"Establish a size limit for C. opilio."

The Association would like to have more information on this proposal.



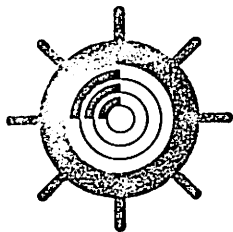
North Pacific
Fishing Vessel
Owners' Association

Proposal #87

"Prohibit inwater storage of crab pots near the Pribilof Islands during the months of June, July and August."

The Association met with the makers of the proposal, crab and halibut fishermen, and representatives from joint venture and Japanese fisheries to find a solution to the storage problem in the Pribilofs. The group came up with the following storage areas:

- (1) Pots may be stored year-round in the Pribilof Islands in 25 fathoms of waters or less except from May 1st through September 30th.
- (2) Pots may be stored year-round in the waters north of 56°41' North latitude, south of 57°20' North latitude, east of 169°30' West longitude, and west of 169° West longitude.

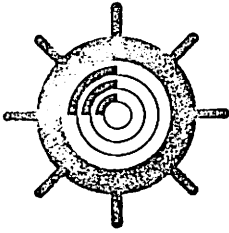


**North Pacific
Fishing Vessel
Owners' Association**

Proposal #88

A proposal which requests the Board to "adopt regulations to prevent the harvest and processing of sublegal size king and tanner crab by catcher-processors."

The Association wants more information on this proposal.



North Pacific
Fishing Vessel
Owners' Association

Proposal #89

"Set a year-round season for [Korean hair crab for the] area west of Cape Kumlik."

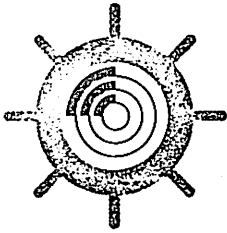
The Association supports this proposal.

Last year, ADF&G reopened the Korean hair crab fishery within 3 miles of the Pribilof Islands on August 10th after the fishery had been closed June 30th by emergency order to protect the crab during molting. ADF&G gave the following rationale for the reopening:

"Since the life history of the Korean hair crab has not been established in respect to the annual molting cycle, the actual period required for these crab to recover from the post-molting condition requires a fishing effort to evaluate the future establishment of the commercial season."

ADF&G also stated that a reopening was warranted in order to maximize the utilization of this resource. Since there was an abundance of crab more than 3 miles beyond the lower tide mark of the Pribilofs, those waters were also reopened.

Conditions have not changed since last year. Data on the abundance, distribution and life cycle of the Korean hair crab are still needed by fishery managers, and a year-round fishery for all areas west of the longitude of Cape Kumlick would enable them to collect this information.



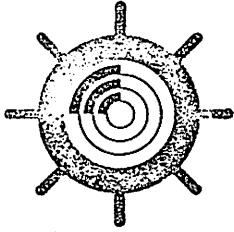
North Pacific
Fishing Vessel
Owners' Association

Proposal #99

"Prohibit [statewide] in-water storage
of king crab pots."

The Association opposes this proposal.

Please see Association comments on Proposals 61, 68, 82 and 83.

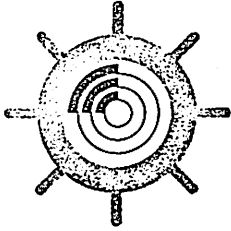


North Pacific
Fishing Vessel
Owners' Association

Proposal #106

"Prohibit simultaneous operation of
trawls and pots."

The Association opposes this proposal; it would prohibit trawling
for bait.

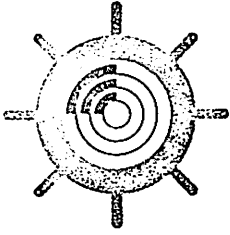


North Pacific
Fishing Vessel
Owners' Association

Proposal #107

"Establish a new category of fishing [personal use] and adopt regulations for the taking of fish under that category."

The Association needs more information on this proposal.



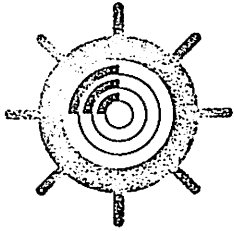
North Pacific
Fishing Vessel
Owners' Association

Proposal #119

"Present management options for the
Southeast bottomfish fishery."

The Association opposes all three options. Although Option 1 is the least onerous of the three alternatives, it still leaves the development of a trawl fishery to the discretion of the Commissioner rather than the initiative of the fishermen. If there are potential conflicts between user groups, wouldn't it be better for the Commissioner to bring the groups together to try to resolve the issues in a manner that is satisfactory to all?

The Association would also like an opportunity to examine the data which are being used to justify restrictions on the trawl fishery. Could it be that incidental catches are increasing due to increased populations of those species?

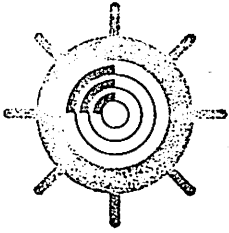


North Pacific
Fishing Vessel
Owners' Association

Proposal #126

A proposal which establishes user group priorities.

The Association opposes this proposal.



North Pacific
Fishing Vessel
Owners' Association

Proposal #127

A proposal that "all shellfish surveys be done by experienced vessels and crew, with no less than 5 years experience in areas affected."

The Association supports this proposal.