MEMORANDUM

TO: Council, SSC and AP Members

FROM: Clarence G. Pautzke
Executive Director

DATE: September 19, 1988

SUBJECT: Bering Sea/Aleutian Islands King and Tanner Crab Fishery Management Plan

ACTION REQUIRED

Approve draft FMP for Secretarial review.

BACKGROUND

Scheduled for this meeting is approval of the Bering Sea/Aleutian Islands King and Tanner Crab FMP for Secretarial review. The Council approved the draft FMP, draft Environmental Assessment/Initial Regulatory Impact Review/Initial Regulatory Flexibility Analysis (EA/RIR/IRFA), and implementing regulations for public review last June. The public review period began on July 6 and ended September 5. Comments received during the period are included in your notebooks as item D-2(a). I have also provided descriptions of the various advisory groups proposed in the plan, a review of the proposed management measures and their proposed categories, and several decision schematic diagrams for your information as Item D-2(b). The Crab Management Committee will meet on Monday, September 26, to review public comments and develop their recommendations for Council action. With final Council action at this meeting, the FMP could be implemented by April 1989.
SUMMARY REPORT OF THE
CRAB MANAGEMENT COMMITTEE MEETING
September 26-27, 1988
Anchorage, AK

A meeting of the Crab Management Committee was held during the evening of September 26 and 27 to review agency/public comments received on the draft Bering Sea/Aleutian Islands Crab Fishery Management Plan (FMP). Coming into the meeting there were considerable doubts as to whether the State of Alaska would accept the deferred responsibility outlined in the FMP given the comments from the Alaska Board of Fisheries and Alaska Department of Fish & Game.

Committee members in attendance were: Larry Cotter (Chairman), Jim Brooks, Don Collinsworth, John Winther, Ken Larson (NPFVOA), Jeff Stephon (UFMA), and Arni Thomson (ACC). Also in attendance were Alaska Board of Fisheries members, Gary Slaven, Jessie Foster, Bob Lochman, and Bud Hodson. Supporting the Committee were: Steve Davis (NPFMC); Ken Parker, Gordon Kruse, Dana Schmidt, Beth Stewart (ADF&G); Dale Evans, Ray Baglin, and Bob Otto (NMFS), and Craig O'Conner (NOAA-GC). There were over thirty members of the public in attendance.

The Committee carefully reviewed the comments received on the FMP, particularly those of ADF&G. Many of the state's concerns were due to either misunderstandings of the Committee's intentions or editorial problems that were easily addressed by clarification and revisions to the text. Major concerns focused on the management measures themselves and their respective categories. Table 1 shows the management measures and the proposed management category as currently presented in the draft FMP. Table 2 shows the recommendations of ADF&G. The State has recommended that pot limits, registration areas, sex restrictions, observers, and closed waters be moved from Category 1 (i.e., measures fixed in the FMP) to Category 2 (i.e., measures frameworkd and deferred to the State). The State also recommended that the measures, minimum size limits, in-season adjustments, and bycatch limits (within directed crab fisheries) be transferred to Category 3 (i.e., complete deferral to the State). The rationale for these recommendations are presented in the ADF&G comments.

The Committee reviewed these recommendations and agreed that most of these recommended changes should be made. However, the Committee could not come to a consensus on the recommended changes to pot limits, registration areas and closed waters. In addition, NOAA-General Counsel advised that while the Committee can agree with the State that many of these changes should be made, they constitute a significant change from the FMP that was sent out to public review and therefore the revised plan should be sent out to public review again prior to final Council action. The Board of Fisheries also requests an opportunity to review the revised plan at their December meeting.

35B/DB -1-
Following a productive discussion the Committee makes the following recommendations to the Council:

1. That the editorial and clarification changes identified by the Committee and passed to the plan team be incorporated into the final draft FMP,

2. that the recommended changes to sex restrictions and bycatch outlined by the State be incorporated, and that observers, minimum size limits, and inseason adjustments remain in their current categories,

3. that for purposes of public review, a final draft FMP and EA/RIR be prepared that contains as alternatives, the original management category for pot limits, registration areas, and closed waters (the two sections to be combined into Category 1), and the recommended categories of the State. The public review draft would contain management measures as outlined in Table 3,

4. that the revised FMP package be sent out for public review this fall with final Council action scheduled for January. This schedule would allow for Secretarial review and plan implementation prior to the fall 1989 king crab season,

5. that the Council request NOAA–GC, in cooperation with the Crab Interim Action Committee, conduct an analysis of current state crab regulations and statutes for determination of consistency with the FMP, MFCMA, and federal law,

6. and, if necessary, that the Committee offers to meet with the Board in December to review the final draft.

In conclusion, it should again be noted that the Committee entered its meeting with the state having major concerns. Most of these concerns have now been addressed by the Committee. The few remaining issues will receive public comment and the Committee encourages the State and industry to continue with their discussion of these issues. The Committee ended its meeting on a positive note, and with all participants close to full agreement, the Committee believes a delay in Council action is justified.
(as proposed in the current Bering Sea/Aleutian Islands Crab FMP)

Table 1. Proposed management measures used to manage king and Tanner crabs in the Bering Sea/Aleutian Islands management unit by category.

<table>
<thead>
<tr>
<th>Category 1 (Fixed in FMP)</th>
<th>Category 2 (Framed in FMP)</th>
<th>Category 3 (Discretion of State)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Gear</td>
<td>Minimum Size Limits</td>
<td>Reporting Requirements</td>
</tr>
<tr>
<td>Pot Limits</td>
<td>Guideline Harvest Levels</td>
<td>Gear Placement or Removal</td>
</tr>
<tr>
<td>Sex Restrictions</td>
<td>In-season Adjustments</td>
<td>Gear Storage</td>
</tr>
<tr>
<td>Registration Areas</td>
<td>Districts, Subdistricts,</td>
<td>Vessel Tank Inspections</td>
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<tr>
<td>Permit Requirements</td>
<td>and Sections</td>
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</tr>
<tr>
<td>Observers</td>
<td>Closed Waters</td>
<td>Gear Modifications</td>
</tr>
<tr>
<td>Limited Access (Reserved)</td>
<td>Fishing Seasons</td>
<td>Other</td>
</tr>
<tr>
<td>Bycatch Limits (Reserved)</td>
<td>Closed Waters</td>
<td></td>
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<td>Category 1</td>
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<td>Guideline Harvest Levels</td>
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<td>Permit Requirements</td>
<td>District, Subdistricts</td>
<td>Gear Place. and Removal</td>
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<tr>
<td>Limited Access</td>
<td>and Sections</td>
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<tr>
<td>Bycatch Limits (in Groundfish</td>
<td>Closed Waters (both)</td>
<td>Gear Storage</td>
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<td>fisheries)</td>
<td>Fishing Seasons</td>
<td>Vessel Tank Inspections</td>
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<td>Observers</td>
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<td>Other</td>
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<td>Pot Limits</td>
<td>Registration Areas</td>
<td>Minimum Size Limits</td>
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<td>Inseason Adjustments</td>
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<td></td>
<td></td>
<td>Bycatch Limit (in crab fisheries)</td>
</tr>
</tbody>
</table>
Table 3. Revised management measures used to manage king and Tanner crab in the Bering Sea/Aleutian Islands crab FMP.

<table>
<thead>
<tr>
<th>Category 1 (Fixed in FMP)</th>
<th>Category 2 (Frameworked in FMP)</th>
<th>Category 3 (Discretion of State)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Gear</td>
<td>Guideline harvest levels</td>
<td>Reporting Requirements</td>
</tr>
<tr>
<td>Permit Requirements</td>
<td>Districts, Subdivision and Sections</td>
<td>Gear Placement and Removal</td>
</tr>
<tr>
<td>Limited Access (reserved)</td>
<td>Fishing Seasons</td>
<td>Gear Storage</td>
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<tr>
<td>Observers</td>
<td>Sex Restrictions</td>
<td>Vessel Tank Inspection</td>
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<td></td>
<td>Minimum Size Limits</td>
<td>Gear Modification</td>
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<td>In-season Adjustments</td>
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<td></td>
<td></td>
<td>Bycatch Limits (in crab fisheries)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
</tr>
</tbody>
</table>

Management Category Alternatives:

- Pot Limits
  - Alternative 1 -- place into Category 1
  - Alternative 2 -- place into Category 2

- Registration Areas
  - Alternative 1 -- place into Category 1
  - Alternative 2 -- place into Category 2

- Closed Waters
  - Alternative 1 -- place into Category 1
  - Alternative 2 -- place into Category 2
September 12, 1988

Clarence Pautzke
Executive Director
North Pacific Fishery Management Council
P.O. Box 3136
Anchorage, AK 99510

Dear Mr. Pautzke:

The Alaska Board of Fisheries appreciates this opportunity to comment on the draft Bering Sea King and Tanner Crab Fisheries Management Plan. Council member Larry Cotter reviewed this document for us during our spring shellfish meeting in Anchorage.

The board was quite pleased with the March 1986 council decision to suspend the Tanner Crab FMP, and looked forward to the time when a framework plan could be put in place which delegated management to the state. We favor state management and believe that ADF&G is in the best position to provide in-season management. However, under the terms of the current proposal we would not be inclined to recommend that the Governor accept the delegation.

When the Tanner Crab FMP was repealed, we were given to understand that it would emerge in a "framed" form similar to the king crab framework. This seemed like the best alternative. We believe the current draft does not solve the problems that existed under the old Tanner Crab FMP; it merely extends those problems into the king crab fishery. We believe that this is particularly the case in terms of unnecessary governmental duplication, excessive federal oversight, and the limitations on the board's discretionary authority.

The Board fully understands that under any terms, the Secretary of Commerce must maintain oversight and determine whether regulations are consistent with the Magnuson Act or other applicable federal law. The Board would also welcome full Council, NMFS, and NOAA General Counsel participation in the State's regulatory process.

Although the Board believes that the state regulatory process already provides ample opportunity for public participation, we...
have no objection to working with the proposed Pacific Northwest Crab Industry Advisory Committee. We are not sure what role the plan anticipates for this group in terms of in-season management, and would need further clarification.

As far as participating in the annual public hearing, which has generally been held in Seattle, we would be remiss if we did not point out that this hearing has never been well attended. In fact, we have rarely heard from anyone at that hearing who did not also participate in the board meeting. We believe that this hearing is duplicative, however, we would plan to send a representative if this hearing is an important consideration in the FMP.

That being said, we must point out the sections of this plan that we find unacceptable. The items which are contained in category I are of the greatest concern. The plan amendment process is slow and unable to respond in a timely manner to new information, therefore the Board believes that the state system is better equipped to deal with these issues. Additionally, the board disputes many of the arguments raised in the discussion of category 1 - management tools.

CATEGORY 1:

8.1.1 Legal Gear The board does not dispute the fact that pots and ring nets are the most appropriate gear for king and tanner fisheries. However, the board is concerned that the vague wording of this section may impair the board's ability to set gear specifications.

8.1.2 Pot Limits The board does dispute the findings regarding pot limits. Limiting the amount of gear each vessel may use may make the difference between having a season or not having a season in years of low abundance. We do not dispute the fact that such gear limitations may have allocative impacts. However, we do believe that the prohibition may be detrimental to full utilization of small surpluses.

8.1.3 Sex Restrictions The board would not repeal the ban on harvesting female king or tanner crab without sufficient data to indicate that a harvest strategy of that nature would be beneficial. However, the board sees no reason why such a change should require a plan amendment. Plan amendments do not allow timely management response.

8.1.4 Registration Areas Again, although the board does not anticipate any need to change registration areas at this time, the issue is similar to the pot limit restriction contained 8.1.2. Additionally, current
regulations require fishermen to register in advance of fishing, not in advance of the season. As far as exclusive registration area designations go, these designations must meet the standards set out in state and federal law, including the Magnuson Act. The board believes that it is capable of making those determinations based on the record before it at the time the issues come up.

8.1.6 Observer Requirements Both state and federal law require that observer programs be compatible and not duplicative. The Board has recently adopted a mandatory 100% coverage program for catcher/processors.

8.1.7 Bycatch Limits The board is concerned about the bycatch of king and Tanner crab in nondirected crab fisheries. However, those concerns must be raised in the context of the groundfish fisheries in which they occur.

8.1.8 Limited Access The board has no authority to limit entry into fisheries. That function belongs to the state's Commercial Fisheries Entry Commission. We do not believe that we are equipped to play that role and would gladly defer that issue to the council.

8.1.9 Closed Waters Closing particular waters to the taking of king and Tanner crab is an important management tool as well as an important allocative tool. Closed waters can protect crab and other species. Closed waters may also be required to implement the state subsistence priority law which flows from ANILCA. Although the board does not anticipate the any requests for subsistence-based closures, we feel that the state and federal subsistence mandates require rapid response.

CATEGORY 2:

The items in category 2 provide fewer concerns for the board. However, the board sees no compelling arguments for leaving these items out of Category 3.

SUMMARY

The board appreciates the efforts to insure that the interests of nonresident fishermen are protected. We do not believe that current regulations or the current regulatory process discriminates against nonresidents. We do not believe that the information contained in the draft plan or the EA/RIR document such discrimination.
We are concerned about the effects of this draft FMP on ADF&G's ability to manage. The department currently commits major personnel and fiscal resources to managing these fisheries. We are not sure that it would be in the state's best interest for them to continue to do so, unless this draft FMP is substantially modified.

Sincerely,

Gary Slaven
Chairman

cc: Board of Fisheries
    Don W. Collinsworth
September 16, 1988

Mr. Clarence Pautzke  
Executive Director  
North Pacific Fishery Management Council  
P.O. Box 3136  
Anchorage, AK 99510  

Dear Mr. Pautzke:

The Alaska Department of Fish and Game (ADF&G), Division of Commercial Fisheries, has completed a thorough review of the draft "Fishery Management Plan (FMP) for the king and Tanner crab fisheries in the Bering Sea/Aleutian Islands (BS/AI)" and the accompanying "Environmental Assessment/Regulatory Impact Review (EA/RIR)." I have enclosed detailed comments on these two documents, and I would like to provide an overview of our major concerns in this cover letter.

Aside from numerous technical issues, some major concerns about this FMP are: (1) curtailing of the authority of the Board of Fisheries (BOF) to effectively manage king and Tanner crabs in the BS/AI management unit; (2) excessive duplication in BOF and North Pacific Fishery Management Council (NPFMC) processes; (3) increased costs associated with plan implementation; and (4) biased treatment against the status quo in the EA/RIR.

I question the ability of the state to effectively manage toward stated management objectives with this FMP as written. On November 20, 1986, a NPFMC work group recommended the development of an FMP that defers management to the state to the maximum extent possible. Yet, this draft FMP restricts the ability of the Board of Fisheries on 15 of 20 measures available for crab management, and nine of these are totally removed from state authority. The sole justification given for many of these restrictions is the potential for discrimination. In fact, the FMP and EA/RIR appear to have been written with the assumption that the current process of crab management has been faulty and discriminatory. But neither document has made any reference to any such incidents.
Restrictions in the authority for the state to manage effort will limit the board's ability to meet the established management objectives. These restrictions will, in some instances, eliminate the tools necessary to insure an orderly fishery, timely regulatory response to changing biological and economic conditions, and long-term conservation of the resource. Therefore, I believe that some changes in category 1, 2, and 3 measures are warranted. Specifically, five management measures (pot limits, sex restrictions, registration areas, closed waters, and observers) should be moved from category 1 to 2, part of one measure (bycatch for directed crab fisheries) from category 1 to 3, and two measures (minimum size limits and inseason adjustments) from category 2 to 3.

The bases for these changes are detailed in the enclosure. As only one example, pot limits are effectively prohibited from use by their placement in category 1. A requirement of plan amendment to implement pot limits may force the state to prohibit a fishery on depressed stocks for which a small quota could have been manageable through this limitation on effort. Rather, pot limits could be framed by the council to prohibit discriminatory use, but to allow a fishery to be prosecuted so that the state can manage toward the biological conservation, economic and social, and research and management objectives of the FMP.

Excessive duplication of effort in BOF and NPFMC processes is of concern with respect to limited staff and fiscal resources of ADF&G, National Marine Fisheries Service (NMFS), and BOF. There are duplicative annual reports (p. 7-8 of FMP) and BOF reports, redundant justifications for inseason management actions (p. 8-21) and Emergency Orders, and duplications in the board and council processes (public testimony, analyses, deliberations, etc.) to handle identical issues. Additional advisory committees (p. 2-7), interim action committees (p. 2-8), and public hearings (p. 2-10) are required which will largely duplicate meetings currently held by the board and department. The advantages of such redundant efforts are not apparent.

These additional meetings, committees, and reports come with a price tag. Clearly, staff time of state and federal agencies will be diluted. Reduced data acquisition and analysis will be part of the cost. This is particularly ironic, because one finding listed in the plan (p. 1-2) is that "the lack of timely and adequate data has hampered decision-making and management to the detriment of the resource and the economy". Besides the fact that this claim is totally unsubstantiated, implementation of the current FMP will promote such a failing. The plan makes no provisions to collect more data, but does provide that
duplicative efforts required for State and Federal regulatory process will reduce the timeliness of existing data acquisition, analyses, and utility in decision-making.

There are also $181,400 in fiscal costs to the state associated with implementation of this FMP (see enclosure). These are additional costs to ADF&G and BOF over and above the current state funds already dedicated to crab management in the BS/AI area. We request that federal funds be appropriated to cover these costs.

Lastly, I question the biased treatment against alternative 1 (status quo). The stated preferred alternative (Alternative 2) costs more than alternative 1, and it curtails the state's ability to meet the management objectives through restricted authority. It will not result in additional data acquisition, but will hamper analysis due to increased administration, and the costs are greater. Alternative 1 remains our preference, but I encourage you to consider our enclosed recommendations which will make Alternative 2 more acceptable.

Sincerely,

Don W. Collinsworth
Commissioner

Enclosures
### Marginal Costs Associated with State's Acceptance of FMP

<table>
<thead>
<tr>
<th>Agency/Item Detail</th>
<th>Cost ($ thousands)</th>
</tr>
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<tbody>
<tr>
<td><strong>ADF&amp;G, Comm. Fisheries</strong></td>
<td></td>
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<tr>
<td><strong>Line</strong></td>
<td></td>
</tr>
<tr>
<td>100 Economist II - 12 MM to provide analyses and reports of economic data such as exvessel value, personal income, employment and other economic impacts needed to satisfy FMP requirements.</td>
<td>57.4</td>
</tr>
<tr>
<td>Fishery Biologist III - 12 MM to advise the Commissioner and Director on issues relating to crab management in the Bering Sea and Aleutian Islands, attend meetings of the Crab Interim Action Committee, Crab Management Committee, Pacific Northwest Crab Industry Advisory Committee, and others as requested by the Commissioner to meet FMP requirements, and to help handle other administrative aspects of FMP implementation. This position is to be supervised by the extended jurisdiction coordinator.</td>
<td>51.0</td>
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<tr>
<td><strong>200 Travel</strong></td>
<td></td>
</tr>
<tr>
<td>Headquarters</td>
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<tr>
<td>Westward Region</td>
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<tr>
<td><strong>300 Contractual</strong></td>
<td>10.0</td>
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<tr>
<td><strong>400 Supplies</strong></td>
<td>3.0</td>
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<tr>
<td><strong>500 Equipment</strong></td>
<td>10.0</td>
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<tr>
<td>One-time purchase of computer system for Economist II</td>
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<td><strong>Board of Fisheries</strong></td>
<td>10.0</td>
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<tr>
<td>Public hearing in Seattle for 7 BOF members and NPFMC attendance for one BOF member</td>
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<tr>
<td><strong>Total</strong></td>
<td>181.4</td>
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ADF&G Comments on the King and Tanner Crab FMP for the Bering Sea and Aleutian Islands (6/30/88 Version)

Pg. 1-2, 2nd Paragraph. The assertion that "lack of timely and adequate data has hampered the decision-making process and management to the detriment of the resource and the economy" requires substantiation. If this is truly a finding, the supportive documentation should be presented for review. Otherwise this item should be deleted. In any case, implementation of this FMP will not correct such a flaw. The FMP does not provide for the acquisition of new data, and the increased administrative burden placed upon State and Federal shellfish staff will reduce the timeliness of data summarization and analyses.

Pg. 2-2, Figure 2.1. To foster the State/Federal partnership in crab management, it is important to require participation (attendance) of NOAA General Counsel, Council, and NMFS staff in the State regulatory process, including advisory committee meetings and staff meetings in Kodiak where the regulations are developed. This participation should include comment upon consistency of proposed regulatory actions with the MFCMA and other applicable Federal law so that management actions can be implemented in a timely manner. The figure on page 2-2 should be modified to reflect this Federal involvement. We provide further comment on this subject on page 2-6, item 4.

Pg. 2-3, Figure 2.2. The first line needs to be edited to reflect that Bering Sea C. opilio closes by Emergency Order, rather than on August 1. The line "Dutch Harbor 11/1-EO" applies to red king crab only. Dutch Harbor brown king crab are no longer by permit, but start on Sept 1st and close by Emergency Order.

Pg. 2-5, item 2. The term "participation" needs further refinement. If Council, NMFS, and NOAA General Counsel actively participate in the development of the regulations with ADF&G and Board staff, the need for item 3 should disappear. As addressed in the comments on page 2-2, these participants should be required at the Dutch Harbor Advisory committee meetings, ADF&G staff meetings addressing regulation development, and Board of Fisheries meetings.

Pg. 2-5, item 3. Comments on this item are deferred to section 9.1.

Pg. 2-6, item 4. As stated in the above item, participation in this process will require representatives from the NMFS office, NOAA General Counsel, the plan team, and other agencies, to travel to local advisory committee meetings and staff meetings, to insure this participation is not an after-the-fact review of actions taken. At this time, all regulations should be interpreted by these Federal employees, as to whether the staff proposals, or public proposals meet the requirements of the Magnuson Act, the FMP, or other Federal law.
Pg. 2-6, item 6. We have concerns about the establishment of the Pacific Northwest Industry Advisory Committee that has equal powers to the local advisory committees, such as Dutch Harbor, Sand Point, and Kodiak, but in addition operates under the auspices of the Council. This provision appears to provide a greater level of access to the State/Federal regulatory processes than is provided to other advisory committees. If this is not the case, we recommend adding a sentence which clarifies the function of the PNIAC relative to existing advisory committees.

Page 2-8, item 9. We question the membership of the Director of Washington State Department of Fisheries on this committee. The state of Washington has no jurisdiction of the Bering Sea-Aleutian Islands fisheries, has no common border with this area, and lacks support staff with expertise in the biology of the species harvested, king and Tanner crab management, and these fisheries in general. Given that this committee only serves an advisory function to the Secretary, we also question the need a third member. If the two person group cannot reach a unanimous opinion, the Secretary should make the final decisions.

Pg. 2-10, item 8. As current policy the State writes justifications for management decisions in Emergency Orders. This item should be clarified to indicate that the Emergency Order justification currently provided by the State meets this requirement.

Pg. 2-10, item 9. If the Pacific Northwest excludes Alaska, this requirement should be removed. The Council in its management of groundfish, has all meetings scheduled for Alaska. This statement apparently provides requirements for public hearings beyond that which the Council provides for management of groundfish.

Pg. 2-10, item 10. This should be edited to reflect the following: "An annual area management report to the Board of Fisheries discussing current biological and economic status of the fisheries, GHL ranges, and support for different management decisions or changes in harvest strategies will be prepared by the State (ADF&G lead agency), with NMFS input incorporated as appropriate. This will be available for public comment, with the Board report presented at least annually at a Council meeting normally held in conjunction with or close to the State Board Meeting in March or April ..."

Pg. 2-11, item 11. A more specific commitment to enforcement is needed. The following sentence should be added:

"This cooperation will entail allocation of dedicated funds and resources to enforcement efforts for specific times, geographic areas, and crab fisheries by Federal enforcement agents and the
U.S. Coast Guard. These enforcement efforts will be coordinated by the Alaska State Department of Public Safety."

Pg. 3-1. The implementation of this FMP should be preceded by mandatory (not discretionary) review of State laws and regulations by the Secretary. The impact of this FMP on existing State management procedures needs to be known before implementation, not after it has been accepted and put into place. This process eliminates the need for the second sentence on page 3-1, because the review will have been conducted. All subsequent appeals to existing State regulations and laws can then be assumed not valid because the review has all ready taken place, prior to implementation.

In addition to deleting the second sentence, the last sentence should be edited as follows: "If the secretary finds, as a result of mandatory review, that any ...".

Pg. 4-5. Registration Year. Registration year does not reflect biology for all king crabs included in the plan. Also, its applicability to OY may vary with the selection of season opening and closing dates by the Board of Fisheries. Therefore, delete the first sentence and replace with: "Registration year is defined as June 28 through June 27 for king crab, and August 1 through July 31 for Tanner crab."

Pg. 5-1. Based upon action taken at the most recent Board of Fisheries meeting, current Board of Fisheries regulations encompass Lithodes couesi, Chionoecetes angulatus, and Chionoecetes tanneri. Therefore, these species should be added to the plan now, rather than through plan amendment at a later date.

Pg. 5-3. Item 1, sentence starting with "Second...". This statement is misleading in that the majority of the fishermen in the most recent red king crab fishery declared their residency as Alaskan. A more accurate statement should be inserted.

Pg 6-1. last paragraph. This paragraph states that "Domestic, foreign and joint venture bycatch ... is currently controlled by ... the groundfish FMP". First, "regulated" is a better term than "controlled". Second, although the management of bycatch with the trawl fisheries is properly regulated by the groundfish FMP, it is important that the documented levels of removal of the crab resource as bycatch be provided to ADF&G and the Board of Fisheries, so that these removals can be accounted for in the management of shellfish under the State's jurisdiction. Therefore, it is advisable to add a closing sentence to the effect that "The Council will provide estimates of levels of king and Tanner crab bycatch in groundfish fisheries prosecuted in the BS/AI management unit in a timely manner to ADF&G and the Board
of Fisheries to allow the State to account for these removals in crab management."

Pg. 7-1. 7.2 Management Objectives. Comments on "weather and safe ocean conditions" are addressed in section 7.2.5.

Pg. 7-5. 7.2.5. The following is a recommended rewrite of the vessel safety objective: "Upon request, the State may consider weather or other ocean conditions affecting the safety of vessels."

Pg. 7-6. 7.2.6. last sentence, first paragraph. Change the word "management" to "Board of Fisheries Advisory Committee".

Page 7-7. second line. The State of Alaska has managed the Bering Sea-Aleutian Islands shellfish population on a day-to-day basis for over a decade. To our knowledge, no examples of alleged discrimination on day-to-day management have been cited in this document or any other. If no problem exists, the need for special means of access beyond that which is already established by State and Federal law is seriously questioned. Therefore, we suggest striking the words "Because of this deferral," from the second sentence on this page. Replace this deleted text with the following "Means of access to the regulatory process ...".

Pg. 7-8. last paragraph. Rewrite this paragraph as follows:
"An annual report to the Alaska State Board of Fisheries will be written by ADF&G (lead agency), with NMFS input incorporated as appropriate. This report will discuss the current biological and economic status of crab stocks and other relevant issues as appropriate." This change is suggested to insure that the contents of the report and the authorship are clear.

Page 8-2. table 8.1. The assignment of management measures to these categories represents a significant shift in the authority of the Board of Fisheries from status quo. In our judgment many of the measures assigned to category 1, and in certain cases, category 2, go beyond the purpose of insuring fair treatment of non-residents in allocative decisions. Under certain circumstances, these restrictions may remove from the Board of Fisheries the management tools necessary to insure an orderly fishery, timely regulatory response to changing biological and economic conditions within the fishery, and long-term conservation of the resource.

If the purpose of having an FMP is to insure compliance with the Magnuson Act and other Federal law, only those provisions that have major allocative concerns should be included in Category 1. Virtually all decisions have some allocative implications, however minor, because any decision that regulates the fishery will affect some users somewhat differently than others. Those
management measures that have a high potential for discrimination use but also a high utility for other non-allocative management goals should be category 2 provisions framed in a manner to prevent discrimination against non-residents.

On these bases, we suggest some changes in placement of category 1, 2, and 3 measures. Specifically, five management measures (pot limits, sex restrictions, registration areas, closed waters, and observers) should be moved from category 1 to 2, part of one measure (bycatch for directed crab fisheries) from category 1 to 3, and two measures (minimum size limits and inseason adjustments) from category 2 to 3.

These suggestions result in the following revised category classifications:

<table>
<thead>
<tr>
<th>Category 1</th>
<th>Category 2</th>
<th>Category 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Gear</td>
<td>Guideline Harvest Levels</td>
<td>Reporting Requirements</td>
</tr>
<tr>
<td>Permit Requirements</td>
<td>Districts, Subdistricts and Sections</td>
<td>Gear Place. and Removal</td>
</tr>
<tr>
<td>Limited Access</td>
<td>Closed Waters (both)</td>
<td>Gear Storage</td>
</tr>
<tr>
<td>Bycatch Limits (in groundfish</td>
<td>Fishing Seasons</td>
<td>Vessel Tank Inspections</td>
</tr>
<tr>
<td>fisheries)</td>
<td>Sex Restrictions</td>
<td>Gear Modific.</td>
</tr>
<tr>
<td></td>
<td>Observers</td>
<td>Other</td>
</tr>
<tr>
<td></td>
<td>Pot Limits</td>
<td>Minimum Size Limits</td>
</tr>
<tr>
<td></td>
<td>Registration Areas</td>
<td>Inseason Adjustments</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bycatch Limit (in crab fisheries)</td>
</tr>
</tbody>
</table>

Comments about these suggested changes in the placement of management measures follow in order of their appearance in the FMP. An attempt has been made to define problems that may occur without the realignment of the above management measures into the appropriate categories, and to discuss the framework provisions which may be required to insure that these measures are applied in a non-discriminatory manner.
Pg. 8-3. 8.1.2 Pot Limits. Our staff disagrees with the logic described in this pot limit section and believes that the concluding sentence is in error. Pot limits may be important in obtaining the biological objectives, as well as the social and economic objectives defined in the plan. The argument that restriction of effort results in economic inefficiency is a "red herring". Restriction of effort by closing seasons and any regulation of catch results in economic inefficiency if overharvesting is not a factor in the economic efficiency equation.

There are at least two situations in which the use of pot limits is warranted to obtain the objectives stated in this FMP. First, because the deployment of excessive amounts of gear may result in high amounts of wastage due to pots lost to advancing ice cover, pot limits may be a useful measure to attain the biological conservation objective. Second, a combination of excessive amounts of gear and relatively small guideline harvest levels may prohibit a fishery from ever opening, if the total number of pots placed on the grounds is not subject to regulation. Thus, a limited but highly valuable fishery may be foregone. Such a situation would make it very difficult to manage toward the economic and social objective. Both of these cases are nearing reality in the Bering Sea-Aleutian Islands crab fisheries; if so, all fishermen, processors, and consumers will lose because of the lack of ability of the Board to implement meaningful effort control through the use of pot limits.

A properly frameworked pot limit need not "pit large vessels against smaller vessels" as stated. Historic data on pot registration as a function of keel length are available for all of the Bering Sea-Aleutian Islands crab fisheries. A relationship between these two variables could be used as a basis for restricting all vessels types equally. The loss of economic efficiency caused by more days required to catch the established quota will be offset by less wastage associated with the capture of crabs in derelict pots, less capital investment in pots that provide no increase in total catch, and most importantly, the ability to have a fishery which otherwise would not occur because the total amount of effort would be so excessive that the harvest could not be properly regulated. There are valid enforcement concerns, but the experience gained in application of pot limits in Cook Inlet and Southeast Alaska could be used to provide for the necessary enforcement provisions. Without this tool, the staff will be forced to ask the Board for closures because of conservation concerns related to too much effort on a depressed stock.

Consistent with these comments, we have attempted to draft a framework provision for the use of pot limits in this FMP. Specifically, we recommend: (1) moving pot limits from category 1 to category 2; (2) striking the existing language under "pot
limits"; and (3) inserting the following draft language for review.

"This FMP authorizes the State to use pot limits to attain the biological conservation objective and the economic and social objective of this FMP. Pot limits must be designed in a non-discriminatory manner. For example, pot limits that are a function of vessel size can be developed which affect large and small vessels equally. Historic data on pot registration and keel length could be used to develop the regulation.

Only special types of situations warrant the use of pot limits; There are at least two such cases. First, because the deployment of excessive amounts of gear may result in high amounts of wastage due to pots lost to advancing ice cover, pot limits may be a useful measure to attain the biological conservation objective. Second, it may not be possible to satisfy conservation concerns in a fishery using excessive amounts of gear to catch a relatively small guideline harvest from a depresed stock. Lacking ability to regulate the total number of pots placed on the grounds, it would otherwise be necessary to prohibit the fishery from ever opening. A limited but highly valuable fishery would be foregone. In this instance, prohibition of the fishery would satisfy biological conservation concerns, but the economic and social objective would not be satisfied. Rather, a pot limit would provide a mechanism to attain the economic and social objective within biological conservation constraints."

Pg. 8-4, 8.1.3 Sex Restrictions. The harvest and landing of female king and Tanner crabs is prohibited by the FMP without adequate justification. Yet, all citations in the RIR/EA document support limited harvest of females. The data to support a limited harvest of female crab under certain stock conditions is available and broadly supported by the scientific community. Only economic arguments would restrict implementing such a season if stock conditions warrant. Other FMP’s for crabs and lobsters, for example, provide for harvest of females under certain conditions, such as those related to egg-bearing condition and size limits restrictions. Likewise in this FMP, this provision should be frameworked, with the framework insuring economic analysis and biological considerations be considered, prior to implementation. Requiring a plan amendment will require an excessive amount of time and an unnecessary duplication of the Board and Council processes to implement such a harvest if conditions warrant.

Pg. 8-4, 8.1.4 Registration Areas. The assignment of areas to exclusive or super exclusive status can have a conservation basis under certain circumstances. The inclusion of this measure in
category 1 would eliminate a mechanism to reduce effort when required to harvest depressed stocks. Therefore, registration areas should be frameworked as a category 2 measure to allow their use by the State when warranted for conservation.

Pg. 8-9, 8.1.5 Permit Requirements.

Lacking any Federal permitting structure, this requirement is essential for monitoring catch and effort. Therefore, the word "assumes" must be changed to "requires". This statement will leave no doubt about this requirement by the FMP.

Pg. 8-9, 8.1.6 Observer requirements. Our staff raised some questions about the relationship of this provision to the current program. Perhaps clarification is all that is required. There appears to be no basis for placing this provision in category 1, because no specific directions or details are provided about an observer program. The general criteria written for establishment of an observer program suggest that it may be more amenable to a "frameworked" category 2 management measure rather than a category 1 measure.

We also recommend that the third and fourth lines of this section be edited as follows to clearly provide equal authority to the NMFS and State of Alaska for the establishment of observer programs. After "... required to take aboard an observer, when" place the following: "directed by the Commissioner of the Alaska Department of Fish and Game, the State of Alaska, or the Regional Director of the Alaska region of NMFS. The observer programs should be coordinated."

Pg. 8-10, 8.1.7 Bycatch Limits. The restriction on bycatch limits for other fisheries, besides the crab fishery may properly remain in category 1 because they are regulated from within the groundfish FMP. As these decisions may in certain cases, affect the management of crab, the Board should be involved in the establishment of these bycatch provisions and have full access to pertinent information to ensure consistent decisions are made in the management of shellfish. For the same reasons that this plan attempts to ensure that the Council and non-resident fishermen are duly informed about Board actions, there must be equal provision for information transfer to the Board on issues useful to completion of their shellfish management responsibilities. Language concerning such information transfer should be incorporated into this plan.

The establishment of bycatch limits of other species of crab and finfish within the directed crab fishery should be deferred to the State of Alaska. For example, this past year the C. bairdi fishery in the Bering Sea was curtailed because of very high bycatch rates of red king crab in the soft shell condition as described in the Emergency Order. To not limit the State's
authority for regulating the directed fishery with regard to bycatch within the directed fishery, the bycatch limit measure should be separated into two parts. The part dealing with management of bycatch within the directed crab fishery should be deferred to the State as a category 3 measure. Often, regulation of bycatch in the directed fishery involves no or limited allocation, because the same fishermen participate in both fisheries. On the other hand, requiring plan amendments and Council review to restrict bycatch within the directed crab fishery is redundant and has little value.

Pg. 8-11, 8.1.9 Closed Waters. This section should be frameworked, not fixed. The boundaries of the closed areas of the Bering Sea to meet state subsistence requirements of Bering Sea rural residents may require reduction or expansion.

Pg. 8-11, 8.2.1 Minimum Size Limits. Although the provisions here provide a broad enough framework for the State Board of Fisheries to operate, this provision is better deferred to the State. The information required to meet the stated framework is not well enough defined to change the existing Board process in any way. And the oversight provided by the plan does not relate to discrimination or any other factors.

The words "a biological and economic analysis" in the second paragraph should be changed to "an analysis". Changes in size limits must have adequate justification, however there is concern about what is meant by a "biological" and an "economic" analysis. In addition, because economics may change rapidly, it is not clear that an industry preference for larger crab, for example, needs to be imposed through regulation. As with opilio in the Bering Sea, effective size limits that exceed the minimum required for conservation needs can be adjusted by the industry rather than regulation. The annual guideline harvest level is adjusted based upon this size preference.

Pg 8-15, 8.2.2 Guideline Harvest Levels. The statement in the middle of the page "... will be considered ..." should be changed to "... may be considered ...". In some of the fisheries, these data are not be available and cannot be considered. Yet, this could be construed as invalidating any GHL made with less than complete data. More often than not, this is a reality in the management of Bering Sea-Aleutian Islands crab stocks.

Pg 8-17. The statement that absolute abundance estimates for type I stocks provide much more accurate estimate of ABC's than relative abundance estimates for type II populations is subject to debate. All Bering Sea-Aleutian Islands shellfish surveys suffer from some imprecision and unknown bias. Survey precision and accuracy related to a relative index and an "absolute" estimate are both affected by survey effort and population
distribution. A pot survey with a CPUE index may provide equally good insight into a stock's status as a trawl survey with unknown or annually variable catchability. The fact that a catchability assumption is used with the trawl survey does not inherently make relative abundance indices less accurate in making estimates of ABC's. In reality, a relative index of abundance can be made into an absolute one by use of Leslie methods or other techniques to develop a catchability estimate for the relative index. Therefore, type II stocks can always be changed to type I with a simple conversion. Conversely, all Bering Sea-Aleutian Islands type I stocks can equally be declared type 2, by recognizing that the catchability of the trawl is unknown. Therefore, we recommend that type I and type II stocks be grouped together to avoid confusion. The establishment of thresholds, based on the type I and type II classification appears to need more review and should probably best be relegated to the Board of Fisheries, using general frameworked provisions for their establishment.

The current definition for type I fisheries contains several parameters that could change annually. These are: the female spawning stock, the recruitment from this spawning stock, the variance in these estimates, average recruitment and its variance. Therefore, annual changes in threshold will occur as each new year of survey data is added, regardless of whether the new data provide any new insight about the threshold. Also, because the proposed formula includes both point estimates and variables, different sets of statistical assumptions could be used to calculate different numbers. Formulas with such characteristics are undesirable and provide for an unstable and highly contestable regulatory regime. The development of specific formulas, including a thorough analysis of their biological and economic consequences are more appropriately left for annual reports and supportive documentation to the Alaska Board of Fisheries. The expertise of the Council and the NMFS can be used in this process as well.

The type II formula given is technically less arguable, but still suffers from annual changes as each new year of survey data is added. We recommend that this language be removed in its entirety, and that thresholds are established using only the definition of 4.2 as the framework under which these numbers are calculated. These values need not be rigidly defined within the plan; Framework language analogous to that presented for the establishment of GHL's could apply to thresholds.

Pg 8-20. 8.2.3. In-season Adjustments. This provision takes the current guidelines from the State Board of Fisheries regulations and implements these as a framework. There does not appear to be any obvious benefit for developing a framework for these provisions, and there are no obvious discretionary allocative implications of in-season authority. If in-season adjustments were deferred to the State, adjustments to these criteria (e.g.,
as a result of legal challenges, etc.) could be made solely by Board actions. As now framed, redundant and time consuming Council action in the form of a plan amendment must occur.

If the provisions remain in the category 2 classification, the second sentence should be edited as follows: "In making such in-season adjustments, the State shall consider appropriate factors to the extent in-season data is available on: ...".

Also on Page 8-21, last sentence, the language should be altered as follows: "... the State shall consider factors to the extent there is information available on such factors."

Pg. 8-22, item 1. Add the following language. Large amounts of effort "(vessels and pots)" are often ...

Pg. 8-32 to 8-36. For those items deferred to the State, a citation of the appropriate State statute and/or regulation is all that is necessary. The explanations are often too abbreviated as to become misleading as to how information was considered by the Board of Fisheries and the Alaska Legislature when developing these provisions. Citation of the appropriate statute is the only method to insure that the language added does not place some restrictions on this deferral to the State nor to create difficulties should the State's statutes or regulations change. Only measure 8.3.6 on page 8-36 should have such provisions, because this item is not included within the State regulations. The language of 8.3.6 is acceptable as written.

Pg. 8-32, 8.3.1 Reporting Requirements. Rewrite first sentence as follows: "All vessels participating in the fishery shall be registered with the State and only State reporting requirements are necessary." We do not understand the suggestion that there are legal reasons to require the word "assume" rather than "require".

Pg. 9.1, 9.1. Current Board policy limits petitions to the subject of conservation emergencies or the petition will be automatically rejected by the Board. The revised language of section 3.1, requiring mandatory review by the Secretary of Commerce before implementation of the plan and the accompanying regulation, would replace this section and eliminate its need. The term "other State crab regulatory body" needs to be defined better to avoid confusion. It is our understanding that this would be the regulatory body that would exist if the Board of Fisheries were to dissolve.

Pg. 9-2, 9.3. We recognize that the Secretary can and must determine whether State regulations are consistent with the Magnuson Fishery Management Act and other applicable Federal law. However, we question the need to establish a lengthy appeals
process above that currently available through the court system and the Secretary at present.

Pg. 10-1, 10.0. As stated previously, no examples have been given that suggest such appeals processes, beyond those which are established by current regulations and law, are necessary. Without clear evidence of State abuse of in-season regulations in violation of the Magnuson act or Federal law, this section seems to add little to insuring the rights of non-resident fishermen.
ADF&G Comments on the Environmental Assessment/Regulatory Impact Review (6/1/88 Version) of the King and Tanner Crab FMP for the Bering Sea/Aleutian Islands

The following comments should be reviewed in context with the previous comments on the FMP.

Pg. 9-12. Section 2.0. The inclusion of residency data for the 1986 and 1987 years would be helpful. It is our understanding that substantial increases in resident participation in the Bering Sea king crab fisheries have occurred in the last two years. The argument that there is a resident/non-resident problem in allocation does not appear to be solidly supported by the average vessel length data, even for 1985. The average vessel length differences between the two residency types for the king crab fishery is 97 ft versus 105 ft (p. 27). Regulations which discriminate against larger vessel would have very minor discrimination against non-residents. We suspect that differences in average length were even less in more recent years.

Pg. 31. 3.1. Given our comments on Section 2.0 above, impacts of management decisions on the distribution of benefits between Alaska residents and other U.S. citizens are least likely for the Bering Sea than for any of the other crab fisheries managed by the State of Alaska. Differences in vessel size between the two residency groups is relatively minor. Therefore, discrimination against vessels of various sizes will affect owners of those vessels, but should not affect non-residents differentially. Potential discrimination against these vessel owners is the main issue, and this potential will need to be considered by both the Board or the Council in making decisions with these impacts. With the residency factor removed, it is not clear whether the Council or the Board is "more representative" of the vessel owners of various sizes crabbing in the Bering Sea.

Pg. 32. last paragraph. The FMP does not provide a single example of how the interests of non-Alaskan residents have not been taken into account in the management of the BS/AI King and Tanner Crab fisheries.

Pg 32-33. 3.2 Timely Management Responses to Changing Conditions. The assertion that conservatively managed fisheries need less timely management than liberally managed fisheries needs closer examination. A management policy that appears to be conservative may not be in reality if its implementation is not timely, particularly when the ability to manage effort by the Board of Fisheries is eliminated. If a quota can be attained in 3 days for a conservatively managed fishery or 6 days for a liberally managed fishery, and the Federal field order process takes 7 days, one cannot assume the conservative quotas will guard against over fishing. Timeliness is more important when
conservation concerns are high, and less important when they are low. A relationship between timeliness and a particular management philosophy is not so clear.

Pg. 34, 3.5.1. last sentence. This statement infers that more informed decisions will result from implementation of the FMP and associated higher agency costs and the increased constraints requiring more time for resolution. The higher costs are associated with administrative activities to facilitate the Council amendment process and numerous travel and meeting requirements. Because the FMP provides for no new fiscal appropriations to State or Federal agencies, these increased costs will undoubtedly occur at the expense of data collection and research activities. Contrary to the existing text in section 3.5.1, less data and analyses will lead to less well informed decisions.

Pg. 34-35, 3.5.2. This discussion infers that the State currently does not require justification of Emergency Orders. This is incorrect. All Emergency Orders require attached justification. The restatement of this requirement in the FMP is redundant and provides no change from the status quo policies of the Alaska State Board of Fisheries. As previously stated, we take exception that timeliness and low agency cost come at the expense of better information being made to decision makers. More paper being generated for meetings is no substitute for field data collection and scientific analysis of these data for improvement of the management of the fisheries. Administrative costs associated with the FMP will undoubtedly decrease the collection and analysis of data and will result in either the Board or the Council making less informed decisions.

Pg. 35, 3.5.3. The logic of the statement about the advantage of alternative 3 is dubious. Apparently being properly informed of a closure for a four day fishery (Bering Sea 1987 blue king crab), which would have resulted in a massive over-harvest of the quota, is viewed as a favorable tradeoff for this over-harvest. Again, the timeliness and low agency costs traded off against "being better informed" is questionable. Emergency Order justifications would not change, and we believe that current Emergency Orders are an effective means of communication. Their distribution goes to all interested parties, both residents and non-residents, who wish to receive them. The value of their publication in the Federal Register, essentially on the day the action takes effect, may be marginal. The last sentence on page 35 offers no insight and should be struck for editorial reasons.

Pg 36, 3.6.1. The Board can and will address important conservation concerns between seasons by petition, regardless of the year cycle. In addition, issues such as the catcher-processor observer issue, which is state-wide, are addressed on an annual basis. The statement that there are
limited biological and economic analyses suggests that this plan will change all of that. These analyses are based on resources available which will be more diluted to meet administrative needs if this plan is put into effect. No change or a negative change from the status quo will occur if agency resources stay constant and alternatives 2 or 3 are approved.

Pg. 36, 3.6.2. The statement that the frameworks require more analysis than the status quo to justify a change is not clearly spelled out in the FMP. Although economic analysis is specifically mentioned, these analyses, although not detailed, have been provided to the Board in the past. To the best of our knowledge, the current process does not limit the input provided by the parties listed. NMFS routinely take part in staff meetings in the development of staff proposals and in the preparation of GHL’s. The involvement of the SSC, the plan team, and the public beyond the status quo, is not obvious from looking at the frameworked provisions. The Pacific Northwest Crab Industry Advisory Committee is a new construct. It is not obvious that the participants in this group do not have clear avenues to the Board of Fisheries through the existing informational meetings of staff and through the Advisory Committee and Board meeting process. This past Board meeting showed a decided lack of interest by these groups.

The statement is made that the additional costs for analysis and review will outweigh the costs of making less fully informed decisions is questionable. Nowhere in this document or the FMP does it provide any indication as to what new data or new analysis will occur or what resources will become available to insure these additional analyses occur. Undoubtedly, less data will be collected and analyzed to ensure that the administrative and procedural requirements of this FMP (referred to in this section of the RIR as analysis) are met.

Pg. 37, 3.6.3. The suggestion that the Council will be able to make more timely decisions for the regulation of a fishery, regardless of the Board 2 year cycle, requires supportive examples. From staff experience with the Council process, the decision-making process is not as timely as compared to the Board. Repeatedly, the statement is made that all U.S. citizens are not represented by the Board process. This suggests that non-resident discrimination is rampant in the Board process. Examples of such discriminatory regulation of the Bering Sea/Aleutian Islands fisheries must be given.

In summary of this section, critical issues and statewide issues may be addressed by the Board annually. Past experience indicates that the Federal regulatory changes cannot be implemented in as timely a manner as with the Board. One of the reasons the Tanner crab FMP was suspended was because of this lack of timeliness of the Federal regulatory process.
Pg. 38. 3.6.4 and 3.6.5. See comments on page 37, 3.6.3, above.

Pg. 38. 3.6.5, item number 4. This again asserts that more extensive biological and economic analysis will occur because of this FMP. Budget increments are necessary for increased analysis. Staff time used for technical analysis and for in-season data collection will probably be reduced by increased participation in the Board process and plan amendment cycle. Additional administrative requirements do not necessarily equate to more analysis or better insight into the management of the BS/AI king and Tanner crab stocks.

Pg. 39. Although stability is provided by the FMP amendment process, inappropriate regulations (change) may stay on the books long after sufficient scientific justification for their removal is available.

Pg. 41, 4.2 & 4.3. Maximum Sustainable Yield and Optimal Yield are not specific management measures and should not be in this section.

Pg. 43, 4.5 Pot Limits. The statements supporting the restriction on pot limits are based on pure conjecture with no supporting data. Pot limits may not necessarily increase the competitiveness of smaller vessels if they are applied as a function of vessel length and/or historic vessel pot registration.

Paragraph 2 is in disagreement with recent Board actions in other areas of the State. The imposition of a pot limit has been put in place to insure that a fishery occurs that would otherwise be closed without a pot limit. Clearly having in-season management made workable by reduction in effort is preferable to no fishery as an alternative. The idea that reduction of pots would not decrease the catch per day is highly speculative and not supported by research on the subject for king and Tanner crabs. Catch per pot of legal male crabs increases for soak times over the range of 6 to 48 hours for Lithodes aequispina (Sloan and Robinson, 1985), Chionoecetes bairdi (Somerton and Merritt 1986; Johnson, 1985), and Paralithodes camtschatica (Johnson 1985). In the red king crab study, the catch of legal males over a 48 hour soak was more than double the catch at 24 hours, and the catch over 24 hr was more than double the catch over 12 hr. Given these findings, it is doubtful that commercial fishermen would decrease soak time.

References:

Johnson, B.A. 1985. Statistical analysis of the effect of pot soak time on the catch of king crab (Paralithodes camtschatica) and Tanner crab (Chionoecetes bairdi) in
Chiniak Gully near Kodiak Island, Alaska. Alaska Department of Fish and Game, Division of Commercial Fisheries, Informational Leaflet 249. 27 p.


The large versus small vessel argument holds for residents as well as non-residents. Using vessel size and/or historic registration of pots fished as the basis for limiting pots can effectively reduce this discriminatory function of pot limits. A statement is made to the effect that because pot limits are not currently in effect, costs of this provision must exceed benefits of this management strategy. Such a statement is baseless and should be stricken. This "logic" could be equally applied to any regulation not currently in effect.

The conditions in the blue king crab fisheries and possibly the red king crab fishery in the Bering Sea/Aleutian Islands are approaching the situation where a pot limit will be the only means by which a season can occur. The large capital investment in vessels, gear, and processing capabilities available for harvesting C. opilio, are now being used for the harvest of the depressed king crab stocks. The Department is currently considering development of a proposal which will provide for a pot limit for Bering Sea red and blue king crab, based solely on conservation concerns. This would entail using the size of vessel as the basis for assignment of a base number of pots. Depending upon the fishery and the stock condition, the maximum number of pots that could be deployed and safely conduct a fishery would be used as a cap for the entire fleet. The number of pots per vessel would be proportionate to vessel length. Other provisions to insure that enforcement concerns are met would also need to be enacted. A pot limit would be proposed, only if the projected amount of effort would be so large as to require the fishery to be closed for conservation purposes.

Pg. 44, 4.6 Sex Restrictions. There is no justification for requiring a plan amendment to allowing female harvest. This management measure should be deferred to the State (category 3) or frameworked (category 2). Prohibition of female harvests are not supported by the references provided. Requiring a plan amendment for allowing harvests of female crab under certain
stock conditions and economic considerations will not allow timely management of these crab.

Pg. 45. 4.7 Registration Areas. Registration is required in advance of fishing, not in advance of the season.

Pg. 46. last sentence, first paragraph. The statement "it has not been demonstrated that the use of exclusive registration areas is a cost effective solution ...", could just as easily be stated as follows: "It has not been shown that the use of exclusive registration areas is not a cost effective solution in this case." The statements that refer to lack of proven cost effectiveness should be stricken from this document as they do not reflect the full written record of information used by the Board of Fisheries when enacting these provisions. The Board, through staff and public testimony, could have very easily determined that these registrations were, in fact, highly cost effective means of regulating effort.

Pg. 46. 4th paragraph, item 3. Add the following: "Dutch Harbor is a nonexclusive area for Brown crab." In the last sentence of this section, change the word "State" to "Board of Fisheries".

Pg. 47. paragraph 3. The potentially critical problem of lack of required permits should be solved now, not with a plan amendment. If it can be solved with a plan amendment, it can be written into this plan. The plan must require State registration and compliancy with State regulations.

Pg. 48. top paragraph, item 1. The fuel and time spent for picking up an observer is already a cost incurred, for the most part, because of tank inspection requirements.

Pg. 48. item 4. second half of this sentence. If this is implying that the cost incurred will be reduced illegal catch, this should be explicitly stated.

Pg. 48. last sentence first paragraph. Because observers are required only on vessels that process at sea, this statement should be qualified to apply only to them. Comparison with non-processing vessels is mixing apples and oranges, because many economic parameters, such as labor, capital investment, raw fish tax, etc., are different aboard these two types of vessels.

Pg. 48. last sentence paragraph 2. Because the State currently has a program in place, the burden of insuring that additional observers are coordinated and not overly burdensome should lie with any additional Federal observer program. It is not clear why a Federal observer program is required, given the State program. Rewrite as follows: "If the NMFS director requires observers aboard crab vessels, such a program should be coordinated with the State observer program and not be overly
burdensome." Alternative 1 will insure a single agency will operate the observer program, while if alternative 2 or 3 is approved and a Federal observer program put in place, additional administration and coordination costs will be incurred by the Federal government.

Pg. 49, 2nd paragraph. The authority to regulate bycatch in the directed crab fishery has consistently been a State activity within Emergency Order authority of the State. Depending on the definition of the term "limit", the State has used this authority in regulating the *C. bairdii* fishery in the Bering Sea in 1987. This involved premature closure of the *C. bairdii* fishery because of high red king crab bycatch during the molting season for red king crab. Catch rates were used in the Emergency Order justification.

There are no obvious advantages in removing this authority from the State, and as in the example above, there are some obvious disadvantages.

Pg. 49-50, 4.1.2. To meet State subsistence requirements for rural residents, the Board of Fisheries requires authority to modify closed water boundaries. This closed waters provision removes this authority from the Board. Rather, this provision should be framed so that the Board may reduce and expand closed waters for subsistence uses.

Pg. 51, 3rd paragraph. Delete the portion of this paragraph beginning with the words "Recent analyses..." to the end of the paragraph. These references and discussion only confuse, rather than clarify.

Pg. 53, 3rd paragraph, last sentence. The sentence beginning with "However, the framework..." should be deleted. The current Board policy for establishment of king crab harvest guidelines and the review policy of new State fisheries management plans for the Bering Sea, provide equal assurance that alternative 1 will provide the same accountability as alternatives 2 and 3. In addition, the groups doing the analysis under all alternatives have been and will continue to be the same, unless NMFS decides to remove their staff from conducting these activities.

Pg. 54, 4.16 Districts, Subdistricts and Section Boundaries. The second sentence of this section should be rewritten as follows: "If information is available to support such differentiations, such refinements may be justified in terms of biological and economic objectives." The inference that increased costs make such adjustments in boundaries not valid, without a discussion of increased benefits, appears to be a one-sided view of these management measures. The suggested rewrite corrects this.
The last sentence of this section is without support and should be deleted. If boundary changes can be made for allocative purposes under alternatives 1 and 2, they can be made under alternative 3 as well.

There is no obvious value for frameworiking these provisions and they should be deferred to the State. No history or allocative discriminatory action is provided to support the contention that a frameworiked provision for this section is necessary.

Pg. 55. last sentence of 4.17. As with previous statements, although the scheduling of fishing seasons could be done by allocation under alternative 1, no evidence of this occurring in the past in the BS/AI has been provided. The allocative aspects of this provision are supposed to be reduced or eliminated by using alternative 2. The same allocative actions available to the Board would be available to the Council under the plan amendment procedure in alternative 3. This sentence should be eliminated or clarified to more accurately explain the differences under the alternatives. The allocative authority under the frameworiked provision requires certain criteria be met which insure the purpose for setting seasons is to meet the biological and economic objectives of this plan. There is no support for the contention that historic establishment of seasons in the BS/AI has been with the intent of discrimination against non-residents. Within biological constraints, industry has been primarily responsible for establishment of the fishing seasons by providing the Board all of the necessary information to insure the best economic interests of all participants are met.

Pg. 56. last sentence. This sentence should be removed. Confidentiality statutes from both State and Federal regulations have limited data exchange in the past. During the previous year, all data requested by NMFS, that have only non-vessel I.D.s removed, has been provided. Any minor impediments to the free exchange of data are being resolved by modification of the statutes or administrative policies being adopted by the Federal government. The inability or unwillingness of the Federal government to provide timely bycatch data for groundfish vessels fishing in the Bering Sea has created just as many problems as the State confidentiality law has provided for providing similar access to the Bering Sea commercial fishery data.

Pg. 57. 4.1.9, second paragraph. The discussion here is somewhat one-sided. These provisions also allow larger vessels to carry numbers of pots far in excess of their deck space, as well. For example, if a small vessel can carry 40 pots and a large one can carry 80 pots, the difference is 40 pots. If on the other hand, both vessels make two trips, the small vessel has 80 pots and the large vessel has 160 pots fishing. The difference between the two is now 80 pots. Assuming equal catch per pot among all pots,
the larger vessel has increased its profits relative to the smaller vessel by this regulation. The ability of catcher/processors to fish illegally while smaller vessels make multiple runs to port is also not discussed in this section.

Pg. 71, 6.1 Reporting Costs. The argument is made that reporting costs are equal under all three alternatives. Reporting costs to the State are much higher under alternatives 1 and 2, while much more costly to the Federal government under alternative 3. These should be separated. The assumption that there will be no observer program under alternative 3, but there will be under alternatives 1 and 2 is not supported by this document. Alternative 3 does not preclude establishment of an observer program by the Federal government.

Pg. 73, 6.4. Net Benefits and their distribution among participants in the industry. The argument is made that alternatives 2 and 3 are inherently preferable to alternative 1 because the interests and opinions of all users would be given equal consideration. No where in the plan does it cite any specific action where the management of Bering Sea/Aleutian Islands King and Tanner crab have discriminated against non-residents. One could argue that the council is currently represented by minimal interests in small vessels compared to large vessels and alternative 3 will decidedly be against the small vessel owners. Alternative 3 provides no greater assurance that discrimination against a group will not occur than alternative 1. Because of the very small difference in average size of vessels of Bering Sea residents and non-residents, discrimination for or against large or small boat owners is much more likely. This will effect both non-residents and residents of these vessel types positively or negatively, regardless of who makes these decisions.

Pg. 74, last paragraph. This essentially sums up this FMP and related RIR. Management measures are not likely to change in the near term under the various alternatives. However, the ability for the State and the Federal government to collect and analyze data, because resources are transferred to a more cumbersome regulatory process will probably result in less scientific data and analysis involving the management of these fisheries under alternatives 2 and 3.

In summary, the EA/RIR as written, reflects an inherent assumption that the current process of management has been faulty and discriminatory. As with the FMP, there has been no reference to such incidents during the history of State management of Bering Sea/Aleutian Islands crab fisheries. The manner in which it is written presents prejudice in favor of the FMP (alternative 2) or complete Federal management (alternative 3) and against the status quo (Alternative 1), often without documentation supporting the need for changes.
Mr. Donald J. Leedy  
Acting Chief,  
Fisheries Management  
Coordination Division  
National Marine Fisheries Service  
Washington, D.C. 20235  

Dear Mr. Leedy:

I have reviewed the Draft Bering Sea/Aleutian Islands Commercial King and Tanner Crab Fishery Management Plan (FMP), the draft Environmental Assessment, and Regulatory Impact Review. The Coast Guard does not object to the implementation of this FMP.

This FMP provides for consultations with the Coast Guard on fishing vessel safety issues in accordance with Magnuson Fishery Management Act requirements. However, the North Pacific Fishery Management Council may wish to establish a more specific mechanism for consulting with the Seventeenth Coast Guard District with regards to fishing vessel safety issues. Thank you for the opportunity to comment on this FMP. If you have any questions, please contact LTJG Sloma at (202) 267-1155.

Sincerely,

[Signature]

Capt. J. DENNIS  
Captain, U.S., Coast Guard  
Chief, Operational Law Enforcement Division  
By direction of the Commandant
9/2/88

Jim Brooks
Acting Regional Director
P.O. Box 21668
Juneau, Ak. 99802

Dear Jim:

I feel that the system of "joint management" that the NPFMC and the Board of Fisheries have worked out over the years has proven to be flexible and workable, and has provided a system where timely management decisions can be implemented without utilizing what could be a more cumbersome Federal approach.

For the above reasons, I would not like to see a Federal FMP for BS/AI crab fisheries.

Thank you for your consideration.

Gary L. Painter
September 8, 1988

Mr. Ray Baglin  
Fishery Biologist  
Alaska Region  
National Marine Fisheries Service  
Post Office Box 1668  
Juneau, Alaska 99802

Re: Fishery Management Plan for King and Tanner Crab Fisheries in the Bering Sea and Aleutian Islands Area

Dear Mr. Baglin:

I am writing to comment on the above-referenced fishery management plan ("FMP") which the North Pacific Council intends to consider at its upcoming meeting in Anchorage later this month. My comments are submitted on behalf of an ad hoc coalition of at-sea crab processors who own and/or operate approximately 25 vessels in the Bering Sea king and tanner crab fisheries (the "at-sea crab processors").

The members of our group generally support the concept of joint state and federal management of the king and tanner crab fisheries as contemplated in the FMP. They are, however, concerned about a regulation which was recently adopted by the Alaska Board of Fish which mandates a 100% observer program on all vessels which process crab at sea. The costs of this program, which have proven to be far in excess of the estimates presented to the Board, will be borne entirely by the at-sea processing vessels which carry the observers.

While the at-sea crab processors do not oppose the development of an observer program which is based on legitimate data collection needs, which is responsibly developed and implemented with industry participation, and which is not overly burdensome from a cost or operational standpoint, they feel that the program currently being implemented by the Alaska Department of Fish and Game is
Mr. Ray Baglin  
September 8, 1988  
Page 2

deficient in most, if not all, of these respects. Indeed, the ADF&G program is far more onerous from both cost and intrusion on vessel operations standpoints than the foreign observer program administered by NMFS ever was on the foreign fleets which operated off Alaska for years.

As noted in the Environmental Assessment/Regulatory Impact Review (EA/RIR) which was prepared in connection with the FMP, observer programs can "increase the probability of attaining biological and economical objectives of state and federal fishery management if the costs of the observer programs are not excessive." (EA/RIR, p. 47; emphasis added). The EA/RIR recognizes that "the placement of observers on commercial fishing vessels influences the distribution of benefits and costs among vessels because there are a variety of costs imposed on the vessels which have an observer." After identifying some of those costs, the EA/RIR goes on to note that "these costs can be large enough to result in vessels with observers being at a significant disadvantage relative to vessels without observers." Accordingly, the EA/RIR concludes that any state and/or federal observer program(s) maintained after implementation of the FMP are to be co-ordinated and are not to be overly burdensome" (EA/RIR at 48, emphasis added).

The caveat that any state and/or federal observer program administered after the implementation of the FMP not be "overly burdensome" is critical and should, we believe, be incorporated in the FMP itself. Furthermore, any state program in place at the time of FMP adoption should be the subject of rigorous review in terms of its compliance with the FMP, the Magnuson Act, and other applicable law to ensure that it is not "overly burdensome" and that it does not unfairly or discriminatorily disadvantage one component of the industry vis-a-vis another.

Finally, the FMP seems to contemplate the possibility of two separate observer programs, one federal and one state, operating at the same time. If such a situation does develop, we would suggest that the state program cover vessels operating in state waters and the federal program cover vessels operating in the FCZ. Close coordination would be essential between the two programs to ensure integrity of data and to avoid unnecessary duplication of effort and expense -- especially for vessels which operate in both state and federal waters. Under no circumstance should a vessel have to carry two observers (one federal and one state) at the same time.
Thank you for the opportunity to present these comments. Representatives of the at-sea processors coalition will be in attendance at the Council meeting at the end of the month and will be prepared to testify and/or respond to questions on the observer issue at that time.

Sincerely yours,

Michael Stanley

MS:rt
9021K
September 12, 1988

Clarence Pautzke  
Executive Director  
North Pacific Fishery Management Council  
411 West 4th Avenue  
Anchorage, Alaska 99510

Dear Clarence:

Thank you for taking the time to join Thorne and me for lunch in Anchorage. We enjoyed the chance to talk with you, and hope that we can keep in touch with you.

I enjoyed our discussion regarding the various observer programs. The current efforts by the State of Alaska in king crab are alarming to us, and they can only serve to undermine the efforts undertaken by the Council to establish a workable domestic observer program. We can only hope that the Council will use its ability through the crab FMP review process to steer the State program towards a more workable system.

All species of groundfish -- including crab -- should be integrated into a single program that provides needed catch data without unnecessary and cost prohibitive intrusion by the government. Any such program will necessarily require industry support. It is incumbent upon the Council that it undertake a full review of the observer programs proposed by the State of Alaska for king crab. The State of Alaska program did not make any attempt to explore less costly means, or to solicit the views of the industry members affected. I hope that the
Clarence Pautzke  
September 12, 1988  
Page Two

Council will see fit to force a full review before it approves the FMP on crab.

With best regards,

Cordially,

[Signature]

William D. Phillips
Adoption of the draft Bering Sea/Aleutian Islands Crab FMP would formalize the following groups:

1. **Crab Interim Action Committee (CIAC)** - shall be established by the Council for the purpose of providing oversight of this FMP and to provide for Council review of management measures and other relevant matters. The Committee will be made up of the professional fishery managers who serve on the Council (e.g. NMFS Regional Director, ADF&G Commissioner, and WDF Director).

2. **Pacific Northwest Crab Industry Advisory Committee (PNCIAC)** - shall be sanctioned and operate under the Council for purposes of providing information and performing other consultation duties similar to state regional advisory committees. The PNCIAC will be industry funded and shall meet at appropriate times and places during the year to review and advise the State/Council on crab management issues, stock status information, etc. The PNCIAC could request Council review of any relevant matter by bringing issues to the attention of the CIAC described above.

3. **Crab Plan Team** - established by the Council to monitor FMP functions, develop amendments, and prepare environmental and socioeconomic analyses as requested by the Council. The team will be comprised of fishery biologists and resource economists obtained from management agencies and universities.
(as proposed in the current Bering Sea/Aleutian Islands Crab FMP)

Table 1. Proposed management measures used to manage king and Tanner crabs in the Bering Sea/Aleutian Islands management unit by category.

<table>
<thead>
<tr>
<th>Category 1 (Fixed in FMP)</th>
<th>Category 2 (Frameworked in FMP)</th>
<th>Category 3 (Discretion of State)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Gear</td>
<td>Minimum Size Limits</td>
<td>Reporting Requirements</td>
</tr>
<tr>
<td>Pot Limits</td>
<td>Guideline Harvest Levels</td>
<td>Gear Placement or Removal</td>
</tr>
<tr>
<td>Sex Restrictions</td>
<td>In-season Adjustments</td>
<td>Gear Storage</td>
</tr>
<tr>
<td>Registration Areas</td>
<td>Districts, Subdistricts, and Sections</td>
<td>Vessel Tank Inspections</td>
</tr>
<tr>
<td>Permit Requirements</td>
<td>Closed Waters</td>
<td>Gear Modifications</td>
</tr>
<tr>
<td>Observers</td>
<td>Fishing Seasons</td>
<td>Other</td>
</tr>
<tr>
<td>Limited Access (Reserved)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bycatch Limits (Reserved)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closed Waters</td>
<td></td>
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</tbody>
</table>
Appeals Procedure Flow Diagram

The proposed Bering Sea/Aleutian Islands Crab FMP includes a regulatory appeals process which utilizes existing State of Alaska procedures and then, if necessary, Council and Secretarial procedures. The process differs only in timeliness of actions depending on whether the petitioned regulatory action occurred preseason or inseason.

1. Preseason Action

```
   Petition to State
      /      \
     |        |
   Disagrees     Agrees
      /              |
SOC
- Consistency w/FMP, MFCMA, other applicable federal law
      /              |
Disagrees     Agrees
     /                |
State regulation stands     State regulation superseded
```

2. Inseason Action*

```
   Petition to SOC
      |       |
   - Consistency w/FMP, MFCMA, other applicable federal law
      |       |
Disagrees     Agrees
     /                |
State action stands     State regulation is superseded
```

*State may be petitioned under its own procedures simultaneously.
General Secretarial Review of Preseason Regulatory Action Adopted by the State

SOC
- Consistency w/FMP
  MFCMA, other applicable
  federal law

Council
- comments
- recommendations

Public Hearing
(if necessary)

Results from
State's appeal
process

Following State
Shellfish Meeting

Estimated
30-120 days

within 20
days of
Board mtg

Regs Not O.K.

Notice of Proposed Rulemaking
- 30 day public comment period
- notice to Council/State
- State may request hearing
  within 20 days

Regs O.K.

State action stands

Regs Inconsistent

Final Rule

Regs consistent

SOC withdraws
Proposed Rule
- notify Council/State
RESOLUTION NO. 88-40

A RESOLUTION OF THE SWAMC CONCERNING OBSERVERS ON CRAB CATCHER-PROCESSORS.

WHEREAS, the Board of Fisheries and the Department of Fish and Game have expressed their concern about the lack of information from crab catcher-processors; and

WHEREAS, the Board of Fisheries has mandated that all crab catcher-processors carry observers; and

WHEREAS, Alaskans have been excluded from federal observer programs because all training is conducted in Seattle; and

WHEREAS, the Southwest Alaska Municipal Conference feels Alaskans should be employed in State programs; and

WHEREAS, the current crab catcher-processor program, by using third party firms to hire observers, allows Alaskans to be bypassed; and

WHEREAS, the best data will be obtained if the observers are hired by and deployed by the Alaska Department of Fish and Game.

NOW THEREFORE BE IT RESOLVED that SWAMC urges the University of Alaska to set up an observer training program:

BE IT FURTHER RESOLVED that SWAMC urges the Board of Fisheries to direct the Department to Fish and Game to hire and deploy the observers:

BE IT FURTHER RESOLVED that SWAMC urges the State Legislature to assure that adequate funds are available for training and for the administration of the program:

BE IT FURTHER RESOLVED that Alaskan residents have priority for training and hiring as crab catcher-processor observers.

PASSED AND APPROVED THIS 26TH DAY OF AUGUST 1988.

Mary Ann Hardeman
President

Representing Bristol Bay, The Pribilofs, Kodiak and the Aleutians.