MEMORANDUM

TO: Council, SSC, and AP Members

FROM: Chris Oliver  
Executive Director

DATE: November 18, 2002

SUBJECT: Crab Management

ACTION REQUIRED

(a) Receive Committee reports and select preferred alternatives for completed trailing amendments.
(b) Discuss EIS progress and alternatives

(a) The following items contained in trailing amendments will be presented to the Council at this meeting:

1) Captains quota shares (C shares). The Council will be presented the final analysis of options for allocating 3 percent of harvest shares to eligible captains. Several different options are proposed for determining eligibility to receive shares, governing share transfers and use, and limiting ownership of C shares. The analysis examines the different options and their effects on captains, harvesters, processors, and regions through the interactions of the C share program with other aspects of the rationalization program.

2) Sideboard protections. The Council will be presented the final analysis of options for sideboards to limit efforts of BSAI crab fishermen in the Gulf of Alaska Pacific cod fisheries.

3) Alternative protections for communities. The Council will be updated on committee progress by staff. In addition, analyses will be presented of options for the purchase of harvest shares by communities and for a cooling off period for the transfer of processing shares from communities.

4) Data collection. The Council will be presented the analysis of options to establish a system to collect economic data for evaluating the success of the rationalization program. The analysis examines the types of data for collection, the system for collecting those data, and protecting confidentiality. This analysis will either be in the Council notebooks or delivered at the meeting.

5) Mandatory binding arbitration. The Council will be updated on committee progress and on the contracting of an analysis of arbitration structures using experimental economics.
6) **Additional amendments.** The Council will be presented analyses of the following additional amendments or supplemental provisions:

- a provision that would allocate history to owners of sunken vessels for the period of time affected by the sinking.
- options for allocating a portion of the WAI (Adak) golden king crab fishery to the community of Adak.
- options for increased harvest share ownership and use caps for CDQ groups.

(b) To take final action on the preferred rationalization program, an EIS evaluating the program and alternative management of the BSAI crab fisheries must be completed. The central, preferred alternative in that EIS will consist of the Council's June 2002 action, combined with action taken on the suite of trailing amendments (some of which will be resolved at this meeting and some of which will be determined in February). Staff of National Marine Fisheries Service (NOAA Fisheries), the Council, and the State of Alaska Department of Fish and Game are currently preparing a draft of the EIS for Council review at the February meeting. Staff will update the Council of the status of that draft. The Council may also revisit the selection of alternatives for analysis in the EIS.
3.17 Data Collection Program

In June 2001, the Council expressed its interest in receiving input regarding ways to objectively measure the success of the crab rationalization program and asked the Scientific and Statistical Committee (SSC) to identify objective measures. In October, the SSC presented a tentative list of such measures, identified the types of data that would need to be collected to construct those measures, stated the need to have mandatory reporting requirements, and briefly addressed the current data collection programs.

In February 2002, the SSC restated the need for mandatory data reporting as follows:

A critical part of the Council's ability to understand the social and economic consequences of implementation of rationalization measures is mandatory reporting of socioeconomic data. For example, harvest and production costs, expenditure patterns, vessel ownership data including identifiers (name and address files), employment, and earnings data are absolutely necessary to determine the magnitude and distribution of net benefits that arise from the granting of an entitlement to a public resource. If these data had been required as a component of the plan amendments authorizing IFQs in the halibut/sablefish fisheries and co-operatives in the pollock fishery, analysts would be in a much better position to identify the likely economic consequences of the rationalization alternatives currently under consideration for the crab fishery. The SSC recommends that provision of the data listed above be made mandatory. This action is necessary to fulfill the Council's stated desire to have the economic performance of the rationalized crab fishery evaluated.

The draft report prepared by the Inter-Agency Economic Data Collection Workgroup includes a detailed discussion of the need for mandatory data collection programs. That report was presented to the Council in February and appears as section 1 in Appendix 3-7. A discussion paper that identifies objective measures that can be used to monitor the success of the crab rationalization program, identifies the data required to support those objective measures, and briefly discuss several issues associated with implementing mandatory reporting requirements for these data was prepared for the Council in March. The information prepared by the SSC in October 2001 and additional information provided by SSC economists in March 2002 are used extensively in the discussion paper. The discussion paper was revised in August to focus on the objective measures and the data needed to use them. The revised discussion paper appears as section 2 in Appendix 3-7. The part of the initial discussion paper that addressed several issues associated with implementing mandatory reporting requirements is in section 3 of Appendix 3-7.

The types of measures identified in the discussion paper are intended to allow the Council to monitor the success of the crab rationalization program in terms of addressing the five problems currently facing the fishery. Those problems are identified in the BSAI crab rationalization problem statement as amended by the Council in June 2002. Those five problems and the summary of the problems facing the Council are as follows:

Problems facing the fishery include:

i. Resource conservation, utilization and management problems;

ii. Bycatch and its associated mortalities, and potential landing deadloss;
iii. Excess harvesting and processing capacity, as well as low economic returns;
iv. Lack of economic stability for harvesters, processors and coastal communities; and
v. High levels of occupational loss of life and injury.

The problem facing the Council, in the continuing process of comprehensive rationalization, is to develop a management program which slows the race for fish, reduces bycatch and its associated mortalities, provides for conservation to increase the efficacy of crab rebuilding strategies, addresses the social and economic concerns of communities, maintains healthy harvesting and processing sectors and promotes efficiency and safety in the harvesting sector. Any such system should seek to achieve equity between the harvesting and processing sectors, including healthy, stable and competitive markets.

Between the April and June 2002 Council meetings, informal discussions were held with members of the agencies involved in crab management and the fishing industry regarding the collection of economic data. While these meetings did not define a complete program to collect economic data for the BSAI crab fisheries, they did provide insights into the types of data that would be required and some of the concerns members of industry have with providing the data. These issues are discussed in more detail in section 4 of Appendix 3-7.

The following Council motion made in June 2002 is a response to the SSC’s recommendation, the information in the draft report and discussion paper, and comments from the fishing industry and other participants in the Council process.

14. The North Pacific Fishery Management Council and the National Marine Fisheries Service shall have the authority to implement a mandatory data collection program of cost, revenue, ownership and employment data upon members of the BSAI crab fishing industry harvesting or processing fish under the Council’s authority. Data collected under this authority will be maintained in a confidential manner and may not be released to any party other than staffs of federal and state agencies directly involved in the management of the fisheries under the Council’s authority and their contractors.

A mandatory data collection program shall be developed and implemented as part of the crab rationalization program and continued through the life of the program. Cost, revenue, ownership and employment data will be collected on a periodic basis (based on scientific requirements) to provide the information necessary to study the impacts of the crab rationalization program as well as collecting data that could be used to analyze the economic and social impacts of future FMP amendments on industry, regions, and localities. This data collection effort is also required to fulfill the Council problem statement requiring a crab rationalization program that would achieve “equity between the harvesting and processing sectors” and to monitor the “…economic stability for harvesters, processors and coastal communities”. Both statutory and regulatory language shall be developed to ensure the confidentiality of these data.

Any mandatory data collection program shall include: A comprehensive discussion of the enforcement of such a program, including enforcement actions that would be taken if inaccuracies in the data are found. The intent of this action would be to ensure that accurate data are collected without being overly burdensome on industry for unintended errors.
3.17.1 Data Collection Developments Since the June Council Meeting

Before the June Council meeting, the Council appointed a workgroup comprised of members of the crab harvesting and processing sectors to develop a proposal for collecting economic data. That workgroup has met five times with agency staff present and at least three times on their own since the June Council meeting and a sixth joint meeting is scheduled before the December Council meeting. The workgroup focused on what data should be collected, how it should be collected, the rules regarding access the data, and how the data will be used after it is collected. Minutes from each of the meetings where agency staff was present are attached as Section 5 of Appendix 3-7.

The purpose of forming the crab data collection committee was to bring together representatives from industry and the state and federal agencies to develop the structure of a mandatory data collection program. Given that existing data collection mechanisms compile very limited economic data, an expanded data collection program will provide the additional data required to analyze the effects of any crab rationalization program that is implemented and of future FMP amendments. The benefit of a collaborative approach between industry and agency staff is that it allows the committee to exploit the specific areas of expertise possessed by both groups.

The analysts are well aware of the measures that are best suited to address the questions posed by the Council and the data required to support such measures. The industry is best informed about the way in which records are typically kept, the frequency with which they are recorded, the difficulty involved in providing these records, and the likelihood of inaccuracies and reporting errors associated with certain types of information. Input by both parties is essential to developing a successful data collection program. For example, the data that economists perceive as the most desirable for constructing accurate and robust measures may be too burdensome for industry to provide. Similarly, the data that industry finds most convenient to provide may not allow the analysts to address the questions posed by the Council, or do so with a sufficient degree of confidence. Therefore, a mutual concerted effort should result in an ability to construct the most sound and informative measures at the least cost and inconvenience to fishery participants.

Before the initial committee meeting, representatives from the state and federal agencies met to discuss the Council’s problem statement, objective measures to assess the effects of rationalization on those problems, and the data required to construct the measures. In drafting the specific data elements that would be needed, the agency participants began by first examining two “worksheets” developed by crab processing and harvesting industry members, respectively. These forms were thought to reflect the data that industry would prefer to have collected.1 Because the data offered in the worksheets was significantly less detailed than that necessary to address many of the Council’s questions, state and federal analysts expanded the industry surveys to facilitate construction of the objective measures. The level of detail requested in the initial agency draft surveys would allow analysts to 1) summarize any changes in revenues and costs that occurred after rationalization; 2) explain the sources and causes of changes in revenues and costs, and separate the effects of rationalization from other sources (such as market or stock effects); and 3) predict how changes in regulations or market factors may affect the revenues, costs, and harvesting/processing decisions of industry participants.

This initial agency draft survey was presented to industry representatives at the first joint meeting of the crab data collection workgroup and agency staff2. Agency representatives asked for feedback regarding data

1 The processor worksheet was part of a document prepared by Moss-Adams for the Council. The harvesting vessel worksheet was of a similar format, though less detailed.

2 See section 6 of Appendix 3-7 for the most recent versions of those surveys.
requests that were 1) too burdensome; 2) asked for at a frequency that differed from the way in which records are typically kept; 3) phrased unclearly; or 4) based upon costs that would be difficult to allocate solely to BSAI crab operations, or to the particular vessel or plant. Issues were identified by industry in all four categories, and all suggestions were noted and incorporated into the surveys. The March 2002 discussion paper was also distributed at the meeting. The focus of the paper was the objective measures that would likely need to be constructed to address the Council's stated issues of concern and the basic data requirements for doing so. An additional aim of the paper was to explain why the data elements included in the initial draft survey were being requested.

At the second joint meeting, the revised agency draft surveys were presented and discussed, and additional industry feedback was requested. Industry provided verbal suggestions on ways to improve the surveys and gave handouts detailing how their records are often kept. Industry also requested more detail regarding how each requested data element would be used, and the specific measure that would be constructed. In preparation for the following meeting, all specific suggestions from the last meeting were incorporated, the changes were noted, and an additional discussion paper was prepared. The goal of this paper was to present each objective measure that could be constructed to address the Council's problem statement (and their five issues of greatest concern), and the specific data required for each. An appendix that attempted to explain the role of statistical inference, biases and problems that arise when aggregating over vessels or plants, and the need for a sufficient number of observations in economic models, was also included.

This document and the newly revised agency draft surveys were discussed in detail at the third joint meeting. All specific industry suggestions regarding the surveys were itemized for inclusion in the revised surveys. The remaining industry concerns that were voiced in the meeting essentially revolved around collecting data on four firm-level "fixed cost" elements that industry felt would be difficult to allocate or prorate to a single vessel or plant. In addition, harvesting vessel representatives posed an objection to requests for trip-level detail on landings, crew payments, pot losses, and average soak time. On this issue the agency staff requested additional time to consider the effects of dropping the items, and later agreed to do so. At the end of this meeting, it was suggested that industry get together in the absence of agency in order to discuss their specific concerns and desires regarding the data collection program.

After the first industry-only meeting, industry representatives distributed documents outlining the results of the meeting. The documents contained each industry group's proposal for the specific data that should be collected. Their proposals varied in the level of detail they indicated they would like to provide, but were much less detailed than the existing draft surveys.

The industry proposals were discussed at the fourth joint meeting. At that point in time, members of industry in general agreed to provide additional information on employment, revenue, variable costs and

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3 Suggestions were also received via e-mail after the meeting. These suggestions were incorporated into the current draft surveys.

4 It is worth noting that up to this point in time, nearly every specific industry suggestion or request had been accommodated by agency personnel. This includes both altering the survey instruments and creating papers and documents to explain the role and needs of each type of data requested.

5 Three proposals were submitted at that meeting. One came from the processor sector. Two other proposals were provided by members of the catcher vessel sector. The catcher/processor sector provided oral comments on their position at the meeting, and those ideas are reflected in the minutes from that meeting. The three written comments are appended to the minutes.
ownership. That information can be used by analysts to provide information for some of the Council’s areas of interest. The information on costs that industry proposed to provide basically covered variable costs. These estimates of total expenditures can be used in conjunction with revenue data to monitor the quasi-rents generated in BSAI crab fisheries only, but do not allow one to discern whether cost changes are due to changes in the quantities of inputs used (due to, say, increased efficiency/productivity) or changes in input prices. Information on the input quantities used (or their prices) must also be provided with the cost data if analysts are to understand the reason for the cost change. Furthermore, the data proposed by industry at that time did not provide analysts with the information necessary to estimate profits or conduct community impact analyses.

In sum, the level of detail proposed by the industry prior to the October Council meeting would have allowed analysts to calculate a portion of the objective measures identified in the discussion papers mentioned earlier in this document, and to compare those measures in the pre- and post-rationalization periods. However, analysts would generally be unable to determine why costs have changed and if such changes were principally the result of the crab rationalization program. These limitations also make it unlikely that analysts would be able to make predictions regarding the effects of the program or effects of changes in the program design. Some fixed cost information will also be required to understand changes in variable costs (fixed costs related to capital equipment and salaried employees) or conduct community impact analyses. See Section 7 of Appendix 3-7 for a detailed list of objective measures of the effects of the crab rationalization program and the analysts’ ability to construct those measures given the September proposals.

At the fifth joint meeting, the workgroup reviewed a staff paper describing the actions taken by the Council at their October meeting and focused on issues identified in the Council’s October motion. The issues are: 1) the need and usefulness of fixed cost data; 2) the need and best way to collect information on location of purchases; 3) the usefulness of a third party data collection system and how it would function; 4) the costs of the program; 4) the need for arms length transaction data on prices; 5) the need for additional community data; 6) crew day estimates; 7) data verification and enforcement; and 8) providing additional protection for confidential data.

3.17.2 Analysis of the Council’s October Motion

Given concerns over the depth of analyses that could be performed with the data collection elements proposed by industry prior to the October Council meeting, the Council identified three alternatives that would provide more complete information for analyzing the effects of rationalization and future FMP amendments. Each alternative essentially involves collecting varying degrees of the elements contained in the surveys developed by staff members at the Alaska Fisheries Science Center, other agencies staff, and the data collection workgroup appointed by the Council. Specifically, each alternative proposes mandatory collection of the variable cost data included in the surveys, but differs in the amount of fixed cost data that would be provided. Each alternative also contains two sub-options that represent different methods of collecting disaggregated data on the location of various expenditures (which could be used to assess community impacts associated with rationalization and future FMP amendments). Both the alternatives and sub-options were developed to provide a broad range of options for the Council to consider in December. The language of the alternatives refer to the draft surveys dated 9/18/2001 in the Council’s October notebook. The alternatives and sub-options, as included in the Council’s motion, are presented below:

Alternative 1. Complete the analysis with the section on fixed costs (e.g., section 6.2 in the cost data surveys).

6See the position papers attached to the September 5 minutes of the workgroup (in section 5 of Appendix 3-7)
Alternative 2. Complete the analysis without the section on fixed costs (e.g., section 6.2 in the cost data surveys).

Alternative 3. Complete the analysis with a subset of the fixed cost data in section 6.2 in the cost data surveys.

Each alternative included the following two sub-options:

Sub-option 1. Utilize disaggregated expenditure and purchase data to measure impacts to communities acquired by mandatory data collection

Sub-option 2. Utilize disaggregated expenditure and purchase data to measure impacts to communities that are provided through a program analogous to the UAF-ADFG on-going opilio impact study.

Alternatives 1 through 3 will be addressed first in this discussion. The sub-options will be addressed later in the document. The paper is structured this way because the three primary alternatives focus on issues related to the collection of fixed cost data, while the sub-option address methods that could be used to collect data on the location of expenditures for use in community impact analyses.

The Council motion indicated that they preferred to focus on costs related to a firm's crab production. Given that understanding, the focus of this analysis will be on data elements related to the BSAI crab fisheries. However, the Council also indicated that they may consider expanding the scope of the program if it were needed to explain impacts of crab rationalization. It should be emphasized that the current alternatives (and draft surveys) do not elicit cost information for non-crab activities and therefore, would not allow analysts to evaluate the overall effect of crab rationalization on a firm's economic performance (i.e., quasi-rents and other measures of interest) if they participate in fisheries other than BSAI crab. Objective measures could simply be computed for the BSAI crab component of a firm's overall operation, and not for the firm as a whole. This means that the Council would continue to have a limited ability to monitor the overall economic performance of those participants in the BSAI crab fisheries that engage in other fisheries.

Therefore, if the Council wishes to facilitate a broader analysis, it will need to specify an alternative in which the variable cost data to be collected would be expanded to include non-crab activities. The fixed costs elements to be collected would be the same as those being considered in Alternatives 1 through 3, and would no longer need to be prorated between crab and non-crab activities.

Before discussing each alternative and the various fixed costs that would be collected within it, we will present a summary of the fixed cost variables contained in the draft surveys. Table 3.17.1 lists the categories of fixed cost variable under consideration and indicate the general type(s) of analysis for which each category of fixed costs is useful or necessary.
Table 3.17.1 Fixed Cost Data and its Role in Analyses

<table>
<thead>
<tr>
<th>Fixed Cost Category</th>
<th>Types of Analysis for Which Data is Useful</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Quasi-Rents</td>
</tr>
<tr>
<td>Insurance</td>
<td>No</td>
</tr>
<tr>
<td>Property Taxes</td>
<td>No</td>
</tr>
<tr>
<td>Principal Payments</td>
<td>No</td>
</tr>
<tr>
<td>Interest Payments</td>
<td>No</td>
</tr>
<tr>
<td>Capital Improvements</td>
<td>Yes</td>
</tr>
<tr>
<td>Repair and Maintenance</td>
<td>Yes</td>
</tr>
<tr>
<td>Salaries for Foremen, Managers, and Other Plant or Vessel Level Employees</td>
<td>Yes</td>
</tr>
<tr>
<td>Other Plant/Vessel Specific Costs</td>
<td>Can be</td>
</tr>
</tbody>
</table>

Alternative 1

Alternative 1 would mandate the collection of all the fixed costs listed in the 9/18/2002 surveys associated with the crab portion of a firm’s operation. These categories are presented in Table 3.17.2 for each of the four sectors. The table reports a “YES” if the sector is asked to report the fixed cost, a “VC” if the cost is already included in the variable cost section of the survey\(^6\), an “N/A” if the cost is not relevant to that sector, and a “NO” if the information is not going to be collected. A similar table will be presented for alternative 3 (the “some fixed costs” alternative).

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\(^7\) The fixed cost elements that “Can be” useful in community impact analyses are useful in situations where the expenditure occurs in a community under study. Property taxes and salaries were categorized as useful since there is little ambiguity that these expenditures serve as a flow of income to community inhabitants. For all other fixed cost elements, it is possible that such expenditures flow elsewhere and may not be used in community impact studies.

\(^6\) The classification of insurance costs (fixed vs. variable) differs between vessels and plants because industry representatives indicated that vessel insurance costs can be quite variable depending on activity levels, while plant insurance costs are not as dependent on activity levels.
### Table 3.17.2: Fixed data to be collected under Alternative 1.

<table>
<thead>
<tr>
<th>Fixed Cost Category</th>
<th>Sectors for which Surveys are Being Developed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Processors</td>
</tr>
<tr>
<td>Insurance</td>
<td>Yes</td>
</tr>
<tr>
<td>Property Taxes</td>
<td>Yes</td>
</tr>
<tr>
<td>Principal Payments</td>
<td>Yes</td>
</tr>
<tr>
<td>Interest Payments</td>
<td>Yes</td>
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<td>Capital Improvements</td>
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<tr>
<td>Repair and Maintenance</td>
<td>Yes</td>
</tr>
<tr>
<td>Salaries for Foremen, Managers, and Other Plant/Vessel Level Employees</td>
<td>Yes</td>
</tr>
<tr>
<td>Other Plant/Vessel Specific Costs</td>
<td>Yes</td>
</tr>
</tbody>
</table>

More detailed descriptions of the fixed cost categories are presented below. Those descriptions provide information on the data that would be collected, a discussion of ways in which the data are useful, and concerns that have been raised by industry representatives over the collection and use of specific categories of fixed cost data. These summaries attempt to convey the discussions that have occurred within the data collection committee meanings, and therefore reflect the minutes from Section 5 in Appendix 3-7. The potential value of collecting some of the fixed cost elements is an ongoing topic of discussion between agency economists and industry, and the industry workgroup has not reached a consensus on some of the issues. For this reason, and because the workgroup did not have adequate time to review the discussions provided in this document, industry may present additional or modified opinions than those expressed to the Council during this or the February meeting.

**Insurance:** This information would be used to track changes in insurance costs within a plant, and perhaps track the contribution of insurance payments to communities (if the money is spent in the communities that are being analyzed). Changes in insurance costs are particularly important if they are a result of the crab rationalization program. For example, heightened safety in rationalized fisheries may decrease the likelihood of an accident and bring about lower insurance costs for vessels. Insurance costs are required to estimate profits.

Members of industry have indicated that changes in the cost of insurance may arise for reasons other than crab rationalization. For example, a plant or vessel may change the level of insurance coverage they carry, change the deductible, or access different rates by changing the provider. Any of those changes could impact the amount a plant would pay for insurance, and attributing those factors to crab rationalization would yield misleading results. While it is true that analysts will be generally unable to identify the exact cause of changing insurance costs, ignoring the role of insurance costs altogether may present a more significant problem.

**Property Taxes:** Property taxes are only relevant for plants that operate on shore. Vessels operating at-sea do not pay property taxes, so this category of fixed cost does not apply to them.
Property taxes may be important in understanding community impacts that result from structural changes in the crab fisheries. Taxes paid by seafood processors are likely an important component of some rural Alaskan communities' operating budgets. Property tax data are required to estimate profits. Note however, that if property taxes are not collected as part of the survey, they are part of the public record and could likely be obtained from other sources.

Members of industry workgroup did not raise specific concerns over the collection and use of property tax data.

**Principal Payments:** Principal payments on loans are included for all sectors surveyed. Although these payments do not affect profits or quasi-rents, they can represent a substantial financial commitment for a firm. Therefore, these payments can be used in generating measures of economic health. One example is the ratio of principal payments to revenue. Boat payments are included in the annual cost data collected in the two mandatory economic data collection programs that NMFS implemented on the east coast.

Members of industry have expressed concern over how these data would be used. They indicated that debt load is only one of many indicators of economic health, that the value of principal payments made may not accurately reflect the underlying debt load, and even if it did, debt load could be misconstrued without information related to the equity of the firm. For example, a firm allocated IFQs may be in a better position to borrow money using their IFQs as collateral, or may make larger principal payments if it undertook more debt. Furthermore, it may also be difficult to allocate debt to the crab production of a firm if the firm is involved in other species.

**Interest Payments:** Interest payments reflect the cost a firm incurs to borrow money. Members of each sector utilize short or long term loans to finance their operations. The cost of borrowing that money is reflected by the interest payments.

Interest payments provide information in two important areas. First, interest payments, in many cases, represent a significant portion of a firm’s costs. Second, the interest payments provide an indication of the underlying debt load, which is an indicator of the well-being of the firm. Because interest payments can represent a significant cost to firms, this information is also useful for conducting net benefit analyses (such costs are included in the producer surplus calculations*). Interest payments could also be included in community impact analysis, depending on the location of the institution granting the loan.

Members of industry noted that it would be difficult to attribute interest payments to the crab portion of a firm’s business. In some cases, banks will ask for collateral that is not related to where the loan is being used. For example, a firm may use an asset for collateral that is part of their crab operation, but the money obtained from the loan would be used for another fishery. Situations such as this will be difficult to reconcile and could be subject to misinterpretation if the loan is not tied directly to crab operations. For this reason, analysts request that data on interest expenditures be provided only when it is actually crab related.

**Capital improvements:** Capital improvements are the annual costs associated with purchasing new equipment or upgrading the plants and vessels involved in the crab fishery. Capital expenditures often have effects on the quantity of variable inputs one must use in harvesting or processing, and thus they help analysts understand changes that have occurred in variable input costs. For example, if a firm reduces labor costs by purchasing new equipment, without information for those fixed costs the analyst would overstate the cost efficiencies afforded by crab rationalization. If the post-rationalization gains in quasi-rents (or decreases in variable costs) are to be analyzed, analysts will need to be cognizant of the primary factors that affect them.

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*Total costs would exclude transfer payments (payments made where no goods or services are purchased) such as taxes.
In general, members of industry agreed that collecting information on these costs that are related to crab fisheries are necessary for the analysts to understand changes in variable costs. Because the Council’s current focus appears to be only those costs associated with crab production, only capital expenditures related to crab would be collected. Capital improvement costs that are only related to the production of other species would not be collected, and any that relate to both crab and other species would be prorated.

**Repair and Maintenance:** Repair and maintenance (R&M) costs are the annual costs associated with keeping existing plants, vessels, and equipment in proper working order. These costs do not include any improvements made to the facilities/vessels.

As with capital improvement costs, only the costs related to crab fisheries would be collected. Costs that are incurred in the production of other species would not be collected, while costs that are incurred in the production of crab and other species would be collected and prorated.

R&M costs are an important element of a crab operation, and changes in those costs may occur post-rationalization due to consolidation. For example, if a crab harvester purchases quota he is likely to expend more time and effort fishing with his boat, which would result in higher R&M costs. In addition, R&M expenditures represent an essential part of community impact analyses.

Members of industry have cautioned the analysts that there are normal fluctuations in R&M costs that should be considered when analyzing the effects of crab rationalization. For example, some repairs are on a one year cycle and some are on a two year cycle (or longer). Care must be taken when looking at variation from year to year, so that cyclical costs are accurately represented. In general, members of industry agreed with the need to collect R&M costs.

Members of industry have also noted that the distinction between capital improvements and R&M costs is not always clear. Therefore, it is important to collect both of these fixed cost categories.

**Salaries for Foremen, Managers, and Other Plant or Vessel Level Employees:** These are the wages/salaries paid to persons who oversee or support the crab operations, but are not physically involved in the harvesting or direct processing of crab.

Agency staff requested this information to better understand the overall employment needed (and costs incurred) to conduct the BSAI crab fisheries. Estimating changes in the overall level of employment and the cost of employing these individuals would not be possible if these data on support staff were not collected. Furthermore, this information is useful in understanding changes in variable costs (and thus, quasi-rents) that may occur after rationalization. Industry has indicated that substitution is possible between direct processing labor (a “variable” cost) and salaried labor (a “fixed” cost), and the structure of employment may change after rationalization. Therefore, if expenditures for salaried employees are not accounted for, estimates of labor cost savings afforded by rationalization may be biased.

Members of industry are concerned that accurately assigning the time these people spend overseeing the crab operation will be difficult for processors. For example, some plant managers may have more than one operation underway simultaneously. In such cases, analysts would be required to allocate the cost of these employees among the activities being undertaken.

**Other Plant-Specific Costs:** The workgroup did not identify any other major fixed cost categories, but included an “other” category just in case a firm has fixed costs that were overlooked.
Additional Elements to be added to 9/18/2002 Surveys:

Assessed Plant Value, Insured Plant or Vessel Value: While these values are not “fixed costs”, agency staff request that information on both the assessed and insured value for plants, and insured value for vessels (as they are not assessed regularly), be provided. Plant information could be used as an indicator of the value of the plant, and thus, help to determine the “sunk costs” of a crab plant. It has been argued in the past that these facilities have no (or very limited) other use(s). Information on the plant value could therefore help members of the public understand the level of unrecoverable investment if processing was no longer viable at a specific location. Furthermore, the value of the plant can be used as an indicator of the capital stock when measuring capacity and capacity utilization. Currently, analysts have no other means of quantifying the capital stock, which will make it difficult to determine whether any substantial differences in variable costs (and thus, quasi-rents) among plants are due to advantages in efficiency or productivity, or due to unaccounted differences in the amount of capital equipment they employ.

Insured vessel value could be used for similar purposes, although basing value estimates solely on insured values could be problematic. The insured value of a vessel reflects not only the underlying value of that vessel (or a replacement vessel), but other factors related to the risk preferences of the vessel owner.

Industry has indicated that assessed values would be much more reliable than insured values, which they consider to be too confounded to convey an accurate representation of the value of the vessel. Therefore, in cases where a recent survey has been conducted (for use in a loan or vessel assistance program), such information would be preferred. However, analysts should be aware that assessed plant values often reflect more than just the processing facilities, and therefore may not be comparable across plants. Furthermore, there may also be difficulties in prorating the value of the plant and equipment to crab when a firm engages in multiple processing activities.

Alternative 1 Conclusions: Collecting information on all of the fixed cost categories listed in the surveys would allow analysts to compute estimates of the profits earned solely in the crab portions of their operations. This would require analysts to prorate\textsuperscript{10} any fixed costs that are not solely crab-related expenditures, which would likely vary according to the method used to prorate the costs. However, ignoring these fixed costs (i.e., assuming that they are zero, or do not differ among firms or over time) would probably introduce larger inaccuracies. Given that crab processors typically engage in multiple operations, and harvesters tend to focus primarily on crab, the prorating problems are likely to be a more significant concern when analyzing processing operations.

Information on all of the fixed cost categories is not necessary to conduct an analysis of quasi-rents. However, three components (capital improvements, repair and maintenance, and payments to salaried employees) are important factors in the determination of quasi-rents, and would markedly improve analysts’ understanding and assessment of changes in quasi-rents (and capacity utilization) for both harvesters and processors.

All of the fixed costs, except property taxes and principal payments, would be needed to conduct a net benefit analysis. Conducting a net-benefit analysis of the BSAI crab fisheries would require prorating any fixed costs that are shared between crab and non-crab operations. Given the potential problems associated with

\textsuperscript{10}The need to allocate fixed costs is not unique to the crab fisheries. Fixed costs are typically prorated using one of several methods, including purchased pounds, finished pounds, days of operation, or gross revenue. Because the prorated costs can differ according to the method selected, it is preferable to record the total expenditures and have the analysts prorate with more than one method. The extent to which the fixed costs differ by prorating method gives an indication of the reliability of the prorated costs.
allocating the fixed costs that are not solely crab related, industry representatives have indicated that they would be suspect of such numbers. As evidence, some industry members claimed that they do not allocate such costs in their internal calculations due to these concerns.

Community impact analyses would likely utilize all of the fixed cost data (except principal payments), in cases where the expenditures occurred in the region of interest. Although it is possible to collect the property tax information from other sources, that would increase the cost of collecting that data.

**Alternative 2:** With Alternative 2, none of the fixed cost data (listed in the tables shown under Alternatives 1 and 3) would be collected. The only cost data to be collected would be the variable costs listed in the other sections of the surveys.

**Alternative 2 Conclusions:** This alternative would not allow the analysts to have access to data that would help explain the source of observed changes in variable costs. Without accounting for expenditures on the capital inputs (new purchases and repairs) used in crab operations, analysts will be unable to understand if changes in variable costs occur due to rationalization or due to increased investment in capital. Without accounting for both the variable and fixed (salaried) costs of labor used in crab harvesting and processing, biased estimates of labor cost savings may be generated. Omission of these fixed cost elements will likely lead to less than satisfactory quasi-rent analyses. This alternative would limit the ability of analysts to estimate community impacts and prevent them from estimating profits (even in the BSAI crab portion of their operations). A majority of the objectives for the crab data collection program would not be met with this alternative.

Most members of the industry workgroup have indicated that they understand the importance of collecting data that would help explain changes in variable costs (and thus, quasi-rents) and that would allow a more complete assessment of community impacts. Members of industry have often said that they want staff to be able to conduct accurate and meaningful analyses, and support the collection of data are useful to achieving that goal.

**Alternative 3:** Alternative 3 would collect some of the fixed costs listed in the survey. Given that the surveys will allow calculation of quasi-rents in crab operations, in this discussion we will assume that “some” fixed costs refer to those needed to conduct a quasi-rent analysis.

To conduct a quasi-rent analysis, the three categories that would help explain changes in variable costs are “capital improvements”, “repair and maintenance”, and “salaries for foremen, managers, and other plant/vessel employees.” Those three categories were discussed under Alternative 1, and are shown as “YES” in Table 3.17.3. Both agency staff and industry representatives have, in general, agreed that data should be collected for those data elements that provide a basis for understanding changes in variable costs. Furthermore, these three “fixed” costs represent important elements for conducting community impact analyses.

**Alternative 3 Conclusions:** Alternative 3 provides analysts the ability to compute quasi-rent estimates, investigate whether any observed changes should be attributed to the crab rationalization program, and account for many of the expenditures that affect fishing communities. However, if the Council wishes to conduct a formal community impact analysis, or assess changes in profits from crab activities, additional information will need to be collected. The former could be done on periodic mandatory surveys that focus on the detail location of all expenditures. A further discussion is provided in the analysis of the sub-options.
Table 3.17.3: Fixed data to be collected under Alternative 3.

<table>
<thead>
<tr>
<th>Fixed Cost Category</th>
<th>Sectors for which Surveys are Being Developed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Processors</td>
</tr>
<tr>
<td>Insurance</td>
<td>No</td>
</tr>
<tr>
<td>Property Taxes</td>
<td>No</td>
</tr>
<tr>
<td>Principal Payments</td>
<td>No</td>
</tr>
<tr>
<td>Interest Payments</td>
<td>No</td>
</tr>
<tr>
<td>Capital Improvements</td>
<td>Yes</td>
</tr>
<tr>
<td>Repair and Maintenance</td>
<td>Yes</td>
</tr>
<tr>
<td>Salaries for Foremen, Managers, and</td>
<td>Yes</td>
</tr>
<tr>
<td>Other Plant or Vessel Level Employees</td>
<td></td>
</tr>
<tr>
<td>Other Plant or Vessel Specific Costs</td>
<td>Yes</td>
</tr>
</tbody>
</table>

In summary, the three alternatives discussed above provide various levels of detail on "fixed" costs incurred in the harvesting and processing of crab. In an attempt to show more specifically the objective measures that can be computed to address the issues the Council has expressed interest in, we provide Table 3.17.4. This table lists each of the objective measures identified by the SSC and agency economists (to assess the effects of crab rationalization) along with the corresponding confidence in the measures that could be obtained under each of the alternatives:
<table>
<thead>
<tr>
<th>Measures</th>
<th>Confidence in Estimate Under Alternative 1</th>
<th>Confidence in Estimate Under Alternative 2</th>
<th>Confidence in Estimate Under Alternative 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harvesting capacity and capacity utilization (CU)</td>
<td>Good estimates can be made.</td>
<td>Standard CU measures cannot be adequately constructed.</td>
<td>Good estimates can be made.</td>
</tr>
<tr>
<td>Processing capacity and capacity utilization</td>
<td>Good estimates can be made.</td>
<td>Standard CU measures cannot be adequately constructed.</td>
<td>Good estimates can be made.</td>
</tr>
<tr>
<td>Harvesting sector profit for BSAI crab only (total revenue - total cost)</td>
<td>Estimates can be made; confidence depends on the number of fixed costs prorated between crab and other activities.</td>
<td>No estimates can be made.</td>
<td>No estimates can be made.</td>
</tr>
<tr>
<td>Harvesting sector quasi rent for BSAI crab only (total revenue - total variable cost)</td>
<td>Good estimates can be made.</td>
<td>Estimates can be made, but the source of changes cannot be adequately explained.</td>
<td>Good estimates can be made.</td>
</tr>
<tr>
<td>Processing sector profit for BSAI crab only</td>
<td>Estimates can be made; confidence depends on the number of fixed costs prorated between crab and other activities.</td>
<td>No estimates can be made.</td>
<td>No estimates can be made.</td>
</tr>
<tr>
<td>Processing sector quasi rent for BSAI crab only</td>
<td>Good estimates can be made.</td>
<td>Estimates can be made, but the source of changes cannot be adequately explained.</td>
<td>Good estimates can be made.</td>
</tr>
<tr>
<td>Harvesting sector productivity and efficiency</td>
<td>Good estimates can be made.</td>
<td>Estimates will be biased without data on capital inputs and salaried employees (when applicable).</td>
<td>Good estimates can be made.</td>
</tr>
</tbody>
</table>

*Issue: Excess Harvesting and Processing Capacity and Low Economic Returns*

11Because alternative 3 specifies “some fixed costs”, and all permutations could not be included in this table, it is assumed that the fixed costs to be collected under that alternative would be those that would allow analysts to understand the source of changes in variable costs. Specifically, “capital purchases”, “repair and maintenance”, and “salaries for plant or vessel employees” are included.
<table>
<thead>
<tr>
<th>Measures</th>
<th>Confidence in Estimate Under Alternative 1</th>
<th>Confidence in Estimate Under Alternative 2</th>
<th>Confidence in Estimate Under Alternative 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processing sector productivity and efficiency</td>
<td>Good estimates can be made.</td>
<td>Estimates will be biased without data on capital inputs and salaried employees.</td>
<td>Good estimates can be made.</td>
</tr>
<tr>
<td>Management costs</td>
<td>Good estimates can be provided by agencies.</td>
<td>Good estimates can be provided by agencies.</td>
<td>Good estimates can be provided by agencies.</td>
</tr>
</tbody>
</table>

**Issue: Lack of Economic Stability for Harvesters, Processors and Coastal Communities**

<table>
<thead>
<tr>
<th></th>
<th>Confidence in Estimate Under Alternative 1</th>
<th>Confidence in Estimate Under Alternative 2</th>
<th>Confidence in Estimate Under Alternative 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution of catch and ex-vessel revenue by vessel class (e.g., length class and type), port of landing, and residence</td>
<td>Good estimates can be made.</td>
<td>Good estimates can be made.</td>
<td>Good estimates can be made.</td>
</tr>
<tr>
<td>Distribution of processed product revenue by community and processor or processor category (size, ownership, location)</td>
<td>Good estimates can be made.</td>
<td>Good estimates can be made.</td>
<td>Good estimates can be made.</td>
</tr>
<tr>
<td>Distribution of profits and quasi rents within and between the harvesting and processing sectors</td>
<td>Confidence of profit estimates (for BSAI crab only) depends on the number of fixed costs prorated between crab and other activities. Good estimates of quasi rents (for BSAI crab only) can be made.</td>
<td>Estimates of profit cannot be made. Estimates of quasi rents (for BSAI crab only) can be made, but the source of changes cannot be adequately explained.</td>
<td>Estimates of profits cannot be made. Good estimates of quasi rents (for BSAI crab only) can be made.</td>
</tr>
<tr>
<td>Distribution of harvester use rights by vessel class</td>
<td>Good estimates can be made.</td>
<td>Good estimates can be made.</td>
<td>Good estimates can be made.</td>
</tr>
<tr>
<td>Distributions of harvester and processor use rights by processor or processor category</td>
<td>Good estimates can be made.</td>
<td>Good estimates can be made.</td>
<td>Good estimates can be made.</td>
</tr>
<tr>
<td>Seasonality of catch and ex-vessel revenue by vessel class, port of landing, and residence</td>
<td>Good estimates can be made.</td>
<td>Good estimates can be made.</td>
<td>Good estimates can be made.</td>
</tr>
<tr>
<td>Measures</td>
<td>Confidence in Estimate Under Alternative 1</td>
<td>Confidence in Estimate Under Alternative 2</td>
<td>Confidence in Estimate Under Alternative 3</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Processor ownership interest in BSAI crab catcher vessels and harvester QS/catch history</td>
<td>Good estimates can be made.</td>
<td>Good estimates can be made.</td>
<td>Good estimates can be made.</td>
</tr>
<tr>
<td>Catcher vessel ownership interest in BSAI crab processors and processing QS/catch history</td>
<td>Good estimates can be made.</td>
<td>Good estimates can be made.</td>
<td>Good estimates can be made.</td>
</tr>
<tr>
<td>Concentration of domestic and foreign ownership in the BSAI crab harvesting and processing sectors</td>
<td>Good estimates can be made if sufficient ownership data is collected (which is not affected by the choice of alternatives).</td>
<td>Good estimates can be made if sufficient ownership data is collected (which is not affected by the choice of alternatives).</td>
<td>Good estimates can be made if sufficient ownership data is collected (which is not affected by the choice of alternatives).</td>
</tr>
<tr>
<td>Level and distribution of harvesting and processing sector employment and payments to labor (number of individuals, hours/days worked, and income)</td>
<td>Good estimates can be made.</td>
<td>Partial estimates can be made, but employees other than crew and direct processing labor (e.g., salaried employees, foremen, managers, other plant employees) would not be accounted for.</td>
<td>Good estimates can be made.</td>
</tr>
<tr>
<td>Degree of involvement of BSAI crab harvesters and processors in other AK fisheries</td>
<td>Good estimates can be made.</td>
<td>Good estimates can be made.</td>
<td>Good estimates can be made.</td>
</tr>
<tr>
<td>Value of use right</td>
<td>Reasonable estimates could be made if RAM tracks the value of transfers.</td>
<td>Reasonable estimates could be made if RAM tracks the value of transfers.</td>
<td>Reasonable estimates could be made if RAM tracks the value of transfers.</td>
</tr>
<tr>
<td>Measures</td>
<td>Confidence in Estimate Under Alternative 1</td>
<td>Confidence in Estimate Under Alternative 2</td>
<td>Confidence in Estimate Under Alternative 3</td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------------------------</td>
<td>-------------------------------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>Regional economic impacts (employment and income) of the BSAI crab fisheries</td>
<td>Under sub-option 1, good estimates can be made. Under sub-option 2, the necessary data is unlikely to be available.</td>
<td>Under sub-option 1, rough estimates can be made (as none of the “fixed” expenditures would be accounted for). Under sub-option 2, the necessary data is unlikely to be available.</td>
<td>Under sub-option 1, estimates can be made (as some “fixed” expenditures would be accounted for). Under sub-option 2, the necessary data is unlikely to be available.</td>
</tr>
</tbody>
</table>

**Issue: High Levels of Loss of Life and Injury**

<table>
<thead>
<tr>
<th>Vessel safety</th>
<th>Reasonable estimates can be made</th>
<th>Reasonable estimates can be made</th>
<th>Reasonable estimates can be made</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of days at sea by weather risk level</td>
<td>Difficult to estimate because we cannot determine the specific days at sea.</td>
<td>Difficult to estimate because we cannot determine the specific days at sea.</td>
<td>Difficult to estimate because we cannot determine the specific days at sea.</td>
</tr>
<tr>
<td>Pots carried or fished per trip by vessel class</td>
<td>Cannot estimate the number of pots fished.</td>
<td>Cannot estimate the number of pots fished.</td>
<td>Cannot estimate the number of pots fished.</td>
</tr>
</tbody>
</table>

**Analysis of Sub-options:** Two sub-options were included under each of the three alternatives discussed above. The sub-options identify two alternative methods of collecting data on the location of purchase for expenditures related to the crab industry. The purpose of these sub-options is to identify the best method to collect the economic data needed to conduct community impact analyses.

**Sub-option 1:** The first sub-option would acquire disaggregated expenditure and purchase data through the mandatory data collection program in order to measure community impacts. To collect the information necessary for a satisfactory community impact analysis, the Council would need to select Alternative 1 from the three fixed cost collection alternatives above. Agency staff would then be allowed to collect all fixed cost data that are needed to conduct community impact analyses. Note that the current surveys would then need to be expanded to collect information on the purchase location for the fixed costs (as they presently elicit the location of expenditure for variable costs only).

The additional information could be collected from all harvesters and processors as part of the overall annual crab survey. Alternatively, it could be collected less frequently and perhaps from a sample of harvesters and processors. With the latter approach, additional questions would be added to the overall annual crab survey, but not every year and perhaps not for all of the participants in the BSAI crab fisheries. The latter approach would decrease the reporting burden for industry, but provide less complete and less timely information. With either approach, staff would rely on small focus groups to provide contextual information that would be difficult to elicit in a more general, annual survey.

**Sub-option 2:** The second sub-option would utilize disaggregated expenditure and purchase data to measure impacts to communities that are provided through a program analogous to the UAF-ADFG on-going opilio...
impact study. That study is a voluntary program designed to collect information specific to the community impacts that result from the BSAI C. opilio fishery.

If the Council wishes to collect this information, it would be better to do so under a mandatory program. A mandatory program would help ensure compliance by the entire industry and would allow for the collection of consistent time series data. Given the lack of success of voluntary data collection programs in the past, collection of these data could only be guaranteed under a mandatory program. Furthermore, the MSA provides additional protection for confidential data collected under mandatory programs.

Should the Council select Sub-option 2, they are indicating their intent to see these data collected in the future. However, this choice would not involve the implementation of any regulations at this time.

Other Issues Raised in the Council Motion:

Confidentiality: Keeping these data confidential is a very important issue to industry members and agency staff. Several methods are being considered to ensure that the data collected under this program will be held in confidence. The methods being explored to keep the data confidential include:

1. Legislation could be requested that provides strict protections for these data when the MSA is amended or when Congress amends the current laws that conflict with the Council’s preferred alternative;

2. Regulations could be implemented as part of the program that protect these data and define the penalties for misuse of the data;

3. Data sharing agreements\textsuperscript{12} between agencies with access to these data could spell out the terms and conditions under which these data may be used; and

4. Data use agreements within agencies could be developed that outline how an agency’s staff are allowed to use the data.

It has been discussed that legislation and regulations may help protect the data from Freedom of Information Act (FOIA) requests. However, a method of protecting the data from court orders has yet to be identified, and may not be possible. Simply put, the best method of protecting the data cannot be determined until Congress acts. Once Congress does act, the agencies will be aware of the legislative confidentiality protections, and can design additional measures if they are needed.

Third Party Data Collection: An option the Council may wish to considered is employing a third party to collect the economic data. The costs associated with using a third party, as well as the efficiencies of using a third party, need to be analyzed relative to other options. To simplify the following discussion, it is assumed that third party collecting the data will be the Pacific States Marine Fisheries Commission (PSMFC). Identifying the PSMFC as the third party allows for a more precise discussion of how the third party system would work and the costs that it would impose.

The cost of using PSMFC to collect the data is likely to be no greater than if NMFS collected the data. NMFS would likely need to add at least one more person to their staff to oversee collection, computer entry, and distribution of the data (to the appropriate analysts). Some of the tasks, such as data entry, may be done

\textsuperscript{12} NOAA GC and State AG staff are aware of this need. Staff from both agencies are collecting background information and when the program is more fully developed will be ready address this issue. They have indicated that they feel the agreement can be in place as soon as the agencies are ready to begin collecting data.
more cost effectively and efficiently by staff hired (and trained) specifically for that purpose. The PSMFC may be in a better position to hire staff to complete those tasks. The PSMFC hiring procedure is likely to be less cumbersome because they are not bound by Federal hiring guidelines that can limit the number of permanent and temporary positions. Freedom to hire employees as needed would ensure that sufficient staff are available to support the data collection program.

The Council’s workgroup indicated that they would expect the third party to develop “blind” data sets that combine the mandatory data collection elements with existing sources such as fishtickets, COAR reports, and CFEC vessel files. Those complete files would contain a unique numerical identifier for each plant or vessel, and would not contain the name of the underlying entities. Structuring the database in such a way would allow the approved state and federal analysts to conduct analyses without having to request PSMFC to combine and deliver specific data sets each time an analysis is undertaken (or different variables are included in a particular analysis). That would greatly reduce staff concerns about timely access to the data sets. PSMFC is also in a very good position to link these data sets, because their AKFIN project has all the data and expertise required to successfully complete such a task.

It should be noted that the use of a “blind” identifier does not provide complete protection for anonymity, in that an analyst could purposely determine the identity of a firm, if they so desired. They would simply need to match other fields on the original fishticket file, for example, with the modified file to determine the identity of the plant or vessel. Therefore, this system will not conceal the identity of a firm from an analyst who undertakes such efforts – an exercise we hope would not occur and that could be prohibited by policy or regulations.

The use of “blind” data sets would require an analyst to go through PSMFC if they have questions regarding the data. This would likely help protect industry from superfluous data inquiries and would help ensure that changes/corrections to the data are directly incorporated into the master data set. However, separating the analysts from industry would reduce an analysts’ ability to ask questions that would help them to better understand an issue. It would also place a greater burden on PSMFC, since they would need to track all of these issues to ensure they are resolved.

Finally, even if a third party is used to collect data and provide it to analysts in a “blind” format, NOAA GC and NMFS enforcement have indicated they would need access to the raw data with the company identified. Without access to the raw data, those agencies have indicated that it is unlikely the program could be enforced. Under such conditions, it is unlikely the program would be approved by the SOC.

Agency staff believe that having PSMFC run the data collection program would be a logical choice, regardless of whether the development of “blind” data is selected as the preferred alternative. PSMFC’s access to all other data sets, knowledge of relational data base design, and role as a “neutral” party could all benefit the process.

Crew Days: The Council asked the workgroup to consider whether good estimates of crew days can be developed using fish tickets combined with crew license identifiers collected under this mandatory program. The workgroup felt that fairly reliable estimates could be made under an open access system using the season start date and the landing date on the fish ticket. However, under a rationalized fishery with extended seasons, additional information would be needed to estimate the number of crew days by vessel. This information could be collected on the survey along with the other crew information that is requested.

Ownership Data: Ownership data will be collected at a level necessary to determine whether a company is within the ownership and use caps included in the program. This information will be collected from
harvesters, processors and others who own QSs. Ownership data will also be broad enough in scope to allow changes in vertical integration to be studied.

**Arm's Length Transaction Data:** There has been some interest in collecting revenue information separately for sales made to firms owned by the same company and those made to a completely unrelated entity. The current surveys ask for revenue information broken out in this manner. However, the usefulness of that data breakdown is still a matter of debate between the members of the data collection workgroup.

**Data Verification:** Regulations need to be developed in order to ensure the accuracy of data being provided and protect the suppliers of the data from fines or other penalties when good faith efforts are made to supply accurate data (even though errors may be found). To help protect both the providers of the data and the agency collecting the information, a review process could be established to ensure the data being submitted is accurate.

A verification protocol similar to that developed for the Pollock surveys would be used as the primary review process. Input from certified public accountants was solicited when NMFS and FSMPC were developing the pollock data collection program. That protocol involves using an accounting firm, agreed upon by the agency and industry, to conduct random review of the data provided. In addition to the random review, a survey may be selected for verification if the data in the survey appears to be incorrect. Such a process would provide industry with an incentive to supply accurate data, it would tend to increase the confidence that industry, management agencies, and other stakeholders would have in assessments based on that data; and it would help to prevent the abuse of the verification and enforcement authority.

**Data for Non-Crab Portion of Operation:** The Council requested that staff focus on collecting data for the firm’s crab operations. However, they noted that if data from other aspects of a firm’s operation are needed to explain the impacts of the crab rationalization program, they may consider including them in the mandatory data collection program. A brief discussion of the potential uses of also collecting data for non-crab activities was presented above, prior to the discussion of Alternative 1.

**Aggregation of Economic Data:** Although the Council did not request staff to evaluate the potential impacts of having access to only aggregated data for performing analyses, some industry members have suggested that they may ask the Council to consider this action. Those members of industry seeking to develop a system that would aggregate the data before being provided to the analysts are doing so to provide more protection for their confidential business information. They feel that it may be possible to develop a system that would allow analysts to adequately do their job while providing more protection for their data.

It is clear that aggregating the results of any analysis is a prudent and necessary step, and would in no way compromise the quality or types of analyses that could be performed. However, aggregating the records prior to analysis would give rise to several problems that would limit analysts’ ability to conduct statistical analysis, verify the accuracy of the records, isolate various groups of interest for the Council, analyze the distribution of gains or losses within the predetermined groups, and in general, to understand the effects of rationalization. Section 8 of Appendix 3-7 provides a thorough discussion of the effects of aggregation in economic analyses, cites over twenty books and papers that discuss aggregation bias, and presents an empirical example of how estimates of fishing capacity for the crab fleet differ when computed with aggregated versus disaggregated data.

Furthermore, aggregating economic data prior to analysis would provide no additional protection from FOIA requests or lawsuits, and would thus, only serve to limit the information made available to analysts and the way in which groups could be constructed and/or compared. Given that the primary purpose of collecting the data is to allow analysts to study the effects of rationalization, aggregating the data for the sole purpose
of masking information or precluding comparisons that may be of interest to the Council appears to go against the purpose of the mandatory data collection program.

References:
Appendix 3-7

Section 7

Potential Uses of the Industry’s September 5th Data Proposal

This section of the appendix provides a discussion of some specific questions that are likely to be of interest to the Council and of the analysts’ ability to answer those questions given the industry’s September 5th data collection proposal (see Appendix 3-7, Section 6 for the submitted documents). As will be shown in more detail below (in Table 3-7.7.1), some of the questions can be addressed adequately and some cannot. Presumably in response to the limited analyses that could be performed with the data provided in the September proposals, in October the Council moved to evaluate three alternatives that mandate the collection of all variable cost data and varying degrees of fixed cost data. In all fairness to industry, they had submitted their proposals before the direction was provided at the October Council meeting, and again have agreed to provide whatever data the Council deems appropriate.

Without information on all input costs and revenues a firm’s profitability cannot be estimated. Therefore, based on the September proposal, the profitability of the industry, sectors within the industry, or firms within each sector, cannot be estimated. Quasi-rents could be estimated, but just for the BSAI crab operations of a firm, and the role of rationalization in any observed cost changes could not be distinguished with confidence. Technical efficiency and productivity of firms within the industry cannot be accurately estimated without measures of all the inputs used in harvesting and processing crab. Cost efficiency of firms cannot be estimated without accompanying measures of the quantity (or price) of the inputs used. Community impact analysis cannot be undertaken without information on the location, price, and quantity of input purchases. Finally, with the data that industry has proposed to provide, it will not be possible to provide accurate estimates of net benefits\(^\text{13}\) to the Council for use in RIRs.

Questions that could be answered with the data in the September 5th proposal are those regarding the number of employees (direct labor only) in the crab fishery, the cost of employing those individuals, changes in ownership patterns and structure, changes in vertical integration, quasi-rents earned solely in the BSAI crab portion of a firm’s business, and the value of QS transfers. The ability to quantify changes in these areas would, however, represent an improvement over our current state of knowledge.

The following table shows issues that the Council may wish to see addressed in their reports, the information that would be available given the September 5th industry proposals and existing data bases, how well that information can address the issues, and the additional data that would be required to perform a satisfactory analysis\(^\text{14}\). The measures to be estimated were taken from Section 2 in Appendix 3-7.

\(^{13}\)Recall that net benefit analyses compute producer surplus (total revenue minus total costs excluding transfer payments [e.g., taxes, grants, etc.]) and consumer surplus within the US economy.

\(^{14}\) The “additional data needed” is that which is generally accepted as a required element of the model(s) typically used by economists to construct each objective measure. Other data elements may be incorporated to enhance one’s confidence in the estimate, but these elements are omitted here.
Table 3-7.7.1 Economic measures, data, and confidence in estimate

<table>
<thead>
<tr>
<th>Measures</th>
<th>Data Collected (italics indicate industry proposed data)</th>
<th>Additional Data Needed from Industry</th>
<th>Confidence in Estimate without this Additional Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harvesting capacity and capacity utilization (CU)</td>
<td>Harvest levels per vessel, time spent fishing, number of active vessels, <em>some variable input costs</em></td>
<td>Complete variable input costs and quantities, “fixed costs” related to capital (R&amp;M and new purchases) and salaried employees</td>
<td>Fishery participation and activity can be monitored, but standard CU measures cannot be adequately constructed.</td>
</tr>
<tr>
<td>Processing capacity and capacity utilization</td>
<td>Processing levels per plant, time spent processing, number of active plants, <em>variable input costs and quantities</em></td>
<td>“Fixed costs” related to capital (R&amp;M and new purchases) and salaried employees</td>
<td>Processing activity can be monitored, and <em>technical</em> capacity and CU measures can be constructed with some caveats.</td>
</tr>
<tr>
<td>Harvesting sector profit for BSAI crab only (total revenue - total cost)</td>
<td>A firm’s revenue and <em>some variable input costs from the BSAI crab fishery only</em></td>
<td>Complete fixed and variable cost data</td>
<td>Cannot be estimated because some variable costs and all fixed costs would not be provided.</td>
</tr>
<tr>
<td>Harvesting sector quasi rent for BSAI crab only (total revenue - total variable cost)</td>
<td>A firm’s revenue and <em>some variable input costs from the BSAI crab fishery only</em></td>
<td>Complete variable input costs and quantities, “fixed costs” related to capital (R&amp;M and new purchases) and salaried employees</td>
<td>Rough estimates for the BSAI crab portion of a firm’s operation could be provided.</td>
</tr>
<tr>
<td>Processing sector profit for BSAI crab only</td>
<td>A firm’s revenue and <em>some variable input costs (and quantities) from BSAI crab processing only</em></td>
<td>Complete fixed and variable cost data</td>
<td>Cannot be estimated because fixed costs would not be provided.</td>
</tr>
</tbody>
</table>

A distinction is drawn here between *technical* and *economic* capacity (and CU) estimates. As discussed earlier, economic capacity estimates reflect the extent to which costs are minimized through utilization of capacity, and thus provide a richer interpretation. Technical capacity (and CU) estimates indicate the extent to which a firm is producing near their maximum physical output level, regardless of cost.
<table>
<thead>
<tr>
<th>Measures</th>
<th>Data Collected (<em>italics</em> indicate industry proposed data)</th>
<th>Additional Data Needed from Industry</th>
<th>Confidence in Estimate without this Additional Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processing sector quasi-rent for BSAI crab only</td>
<td>A firm's revenue and <em>variable input costs (and quantities)</em> from BSAI crab processing only</td>
<td>&quot;Fixed costs&quot; related to capital (R&amp;M and new purchases) and salaried employees</td>
<td>Estimates for the BSAI crab portion of a firm's operation could be provided</td>
</tr>
<tr>
<td>Harvesting sector productivity and efficiency</td>
<td>Catch levels, fishing weeks, pot lifts, <em>some variable input cost data</em></td>
<td>Complete variable input costs and quantities, &quot;fixed costs&quot; related to capital (R&amp;M and new purchases) and salaried employees</td>
<td>Reliable estimates of productivity, technical efficiency, and allocative cost efficiency cannot be developed without measures of input use to accompany the cost data</td>
</tr>
<tr>
<td>Processing sector productivity and efficiency</td>
<td>Production levels, <em>crab purchases</em>, weeks processing crab, <em>variable input cost and quantity data</em></td>
<td>Costs related to capital (R&amp;M and new purchases) and salaried employees</td>
<td>Estimates of productivity, technical efficiency, and allocative cost efficiency can be developed; data on capital expenditures/value are required for good estimates</td>
</tr>
<tr>
<td>Management costs</td>
<td>Will not rely on data collected from industry</td>
<td>None</td>
<td>Good estimates can be provided by agencies.</td>
</tr>
</tbody>
</table>

**Issue:** Lack of Economic Stability for Harvesters, Processors and Coastal Communities

<table>
<thead>
<tr>
<th>Distribution of catch and ex-vessel revenue by vessel class (e.g., length class and type), port of landing, and residence</th>
<th>Revenue, fishtickets, <em>ownership, and employment data (for direct labor)</em></th>
<th>None</th>
<th>Good estimates can be made with the data sources listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution of processed product revenue by community and processor or processor category (size, ownership, location)</td>
<td>Revenue, fishtickets/RAM landings, <em>ownership, and employment data (for direct labor)</em></td>
<td>None</td>
<td>Good estimates can be made with the data sources listed</td>
</tr>
<tr>
<td>Measures</td>
<td>Data Collected (italics indicate industry proposed data)</td>
<td>Additional Data Needed from Industry</td>
<td>Confidence in Estimate without this Additional Data</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------------------------------------------------------</td>
<td>-------------------------------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>Distribution of profits and quasi rents within and between the harvesting and processing sectors</td>
<td>Revenue, <em>some BSAI crab variable costs</em>, and plant/owner location data</td>
<td>Complete variable and fixed costs</td>
<td>Profits cannot be estimated. Quasi rents in BSAI crab (with caveats) could be assigned to plant/ vessel</td>
</tr>
<tr>
<td>Distribution of harvester use rights by vessel class</td>
<td>RAM QS data</td>
<td>None</td>
<td>Good estimates can be made</td>
</tr>
<tr>
<td>Distributions of harvester and processor use rights by processor or processor category</td>
<td>RAM QS data</td>
<td>None</td>
<td>Good estimates can be made</td>
</tr>
<tr>
<td>Seasonality of catch and ex-vessel revenue by vessel class, port of landing, and residence</td>
<td>Fishtickets/RAM <em>landings data, revenue, ownership data</em></td>
<td>None</td>
<td>Good estimates can be made</td>
</tr>
<tr>
<td>Processor ownership interest in BSAI crab catcher vessels and harvester QS/catch history</td>
<td><em>Ownership data, RAM QS data</em></td>
<td>None</td>
<td>Good estimates can be made</td>
</tr>
<tr>
<td>Catcher vessel ownership interest in BSAI crab processors and processing QS/catch history</td>
<td><em>Ownership data, RAM QS data</em></td>
<td>None</td>
<td>Good estimates can be made</td>
</tr>
<tr>
<td>Concentration of domestic and foreign ownership in the BSAI crab harvesting and processing sectors</td>
<td><em>Ownership data/MARAD data.</em></td>
<td>None. Assumes information that links companies to parent companies will be collected</td>
<td>Would need to collect as part of the ownership data or be allowed to access MARAD data.</td>
</tr>
<tr>
<td>Level and distribution of harvesting and processing sector employment and payments to labor (number of individuals, hours/days worked, and income)</td>
<td><em>Aggregate employment data for direct labor</em></td>
<td>Need estimates of hours/days worked, labor cost estimates need to be separated into payments to labor and other labor costs (benefits, training, etc.)</td>
<td>Estimates of labor costs (not wages) and the number of individuals employed would be provided. Hours/days worked would be problematic, and labor payments would have to be imputed from total labor costs</td>
</tr>
<tr>
<td>Measures</td>
<td>Data Collected (italics indicate industry proposed data)</td>
<td>Additional Data Needed from Industry</td>
<td>Confidence in Estimate without this Additional Data</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------------------------------------------------------</td>
<td>-------------------------------------</td>
<td>----------------------------------------------------</td>
</tr>
<tr>
<td>Degree of involvement of BSAI crab harvesters and processors in other AK fisheries</td>
<td>RAM QS data, fish tickets, NMFS Blend data, COAR</td>
<td>None</td>
<td>Good estimates can be made with the listed data sources</td>
</tr>
<tr>
<td>Value of use right</td>
<td>RAM Transfer data</td>
<td>None, assuming RAM tracks transfer prices</td>
<td>Reasonable estimates could be made if RAM tracks the value of transfers</td>
</tr>
<tr>
<td>Regional economic impacts (employment and income) of the BSAI crab fisheries</td>
<td>No data is currently available with industry proposals</td>
<td>Location, quantity, and cost of all purchases made by crab harvesters and processors</td>
<td>Cannot be estimated</td>
</tr>
</tbody>
</table>

**Issue: High Levels of Loss of Life and Injury**

<table>
<thead>
<tr>
<th>Measures</th>
<th>Data Collected</th>
<th>Additional Data Needed from Industry</th>
<th>Confidence in Estimate without this Additional Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vessel safety</td>
<td>USCG vessel safety statistics and NIOSH data</td>
<td>None</td>
<td>Reasonable estimates can be made</td>
</tr>
<tr>
<td>Number of days at sea by weather risk level</td>
<td>Fishtickets and weather service data</td>
<td>Information on specific days at sea</td>
<td>Difficult to estimate because we cannot determine the specific days at sea</td>
</tr>
<tr>
<td>Pots carried or fished per trip by vessel class</td>
<td>Only pot limit and buoy tag data are available</td>
<td>Information on the number of pots fished</td>
<td>Could not estimate the number of pot fished - especially under an IFQ system</td>
</tr>
</tbody>
</table>

Some members of industry have expressed concern that the data collection elements proposed by agency economists will be used to study the profits of individual firms, and that the information might be used in the future to redistribute harvest rights. While it may be possible for that to occur, the questions agency economists are tasked with addressing are rarely concerned with the profits of a single firm. Economic analyses generally focus on “exploring the ins and outs of how society’s pool of scarce resources (natural resources, technology, labor, capital goods, managerial talents) can be utilized to produce a stream of goods and services that produce the greatest consumer and societal fulfillment” (Thompson, 1985).

In producing RIRs for the Council and SOC, analysts are required to estimate the action’s impact on net benefits to the Nation, which does not elicit information in individual plants, vessels, or firms. The Council has also asked for periodic reports on the success of the crab rationalization program. The estimates contained in such reports also do not require the release of individual records. Therefore, none of the

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16 The Council may begin an FMP amendment for a fishery when problems are brought to their attention that they feel warrant action on their part.
information gathered as part of this process would be presented in public documents or reports that would identify the profitability of a vessel/processor/firm. All information would be presented in aggregate to preserve the confidentiality of the participants in the fishery.
Appendix 3-7

Section 8

Effects of Aggregation in Economic Analyses

It is clear that aggregating the results of analyses based upon confidential data is a prudent step, as it protects the identities of all parties involved, yet allows for public discussion of the results. Furthermore, aggregating results obtained from analyses in no way compromises the quality of work, types of methods that can be used, or one’s confidence in the results. The same cannot be said, however, when the underlying data used to construct analyses is aggregated. Aggregating data prior to analyses gives rise to several problems that limit analysts’ ability to understand the effects of rationalization.

Diminished Ability to Verify the Accuracy of Data

When data is only examined at an aggregate level, one is unable to spot data anomalies that may lie within particular observations. Data anomalies would only be obvious if the underlying error is quite large, and would likely go unobserved in other cases. Even in cases where the suspected error were sufficiently large to raise questions, the analyst would be unaware of the specific source that gave rise to the anomaly, which would make it more difficult to track down. Finally, observations which contain outliers (i.e., those which are reported correctly, yet differ greatly from other observations within the sample) cannot be distinguished, interpreted, or handled differently from more representative data points when constructing models or providing descriptive statistics.

Inability to Discern Distributional Impacts

The use of aggregate data does not allow the analyst to describe the number of firms that “gained” or “lost” according to a particular metric (e.g., quasi-rents, profits, productivity, efficiency) — only the net outcome can be expressed. Therefore, it is not possible to determine with certainty whether a majority of firms are better or worse off because of a particular policy action. An obvious result of not being able to discern the number of firms that gained and the number that lost is an inability to explain why that pattern came about. This would make it difficult to adapt policies in response to unintended effects (effects which may be immeasurable, coincidentally, if analysis relies upon aggregated data).

Furthermore, when data is aggregated according to a particular rationale (say, by size class), it is not possible to restructure the data according to other groupings that may be of interest to the Council. Only if all vessels within the aggregated groups share the characteristics of the other groupings can one change the point of reference for the analysis.

Limited Ability to Conduct Statistical Analyses

While aggregate data might provide some useful information for tracking the economic performance (e.g., total quasi-rents for each group or averages across groups) it would not be very useful for policy analysis. With access to only a limited number of observations, one cannot estimate the statistical models that allow analysts to isolate the effects of policies from other external effects (such as market or stock effects). In order to clarify the role of observations within statistical models, the following discussion is provided.

Economic theory is concerned with explaining the relationships among economic variables and using that information to explain, evaluate, and/or predict production, allocation, and distribution decisions. The economic variables typically considered when analyzing production decisions are the inputs used, the output obtained, and the prices paid or received for the inputs and outputs, respectively. This process typically involves specifying a “model” that characterizes the salient aspects of a particular process or decision. The
model defines the general relationships to be examined, and relies upon data on observed choices and factors affecting those choices to provide information on relationships of interest.

One motivation for constructing models, as opposed to merely observing each factor in a production or decision making process in isolation, is that several influential factors may change simultaneously and one cannot distinguish the role (or the relative importance) each may have played on the observed outcome. In such cases, one is unable to give a qualitative or anecdotal description of why the observed result came about. One may be able to use a priori judgement about the effect of each factor in isolation, but the collective effect of simultaneous factors that may each have different and/or offsetting impacts cannot be deciphered.

Fortunately, a statistical model allows one to incorporate several important factors (or “variables”) that collectively determine an outcome, and structure the roles of these variables to reflect the nuances of the situation being examined. The basic structure chosen to characterize these relationships is called the “specification”, which may be thought of as a definition of the variables that affect the decision being examined and the way in which they are involved.

The primary role of the data used in a model is to contribute information to estimate and quantify the role or effect of each variable on the decision. This information then allows one to estimate the overall effects that would arise when multiple variables change simultaneously, or predict the outcome that is likely to occur when the variables take on particular values. Because each data point used in the model represents an observed outcome and gives the corresponding value of the variables that affect that outcome, having more data points generates more evidence to characterize the role and relative magnitude of each variable in the relationship under study. Thus, the quality of the information obtained from the model depends crucially upon the number of observations one has to rely upon.

Once the relationship between outcomes and each influential variable has been estimated, one can construct estimates of the likely outcome that would occur if particular values of the influential variables were to arise. For example, if one has a good estimate of the way (direction and magnitude) in which fishing costs are affected by input prices and stock conditions, and a mechanism to monitor changes in those variables, one can identify the costs changes that arise from other impacts such as a changes in the management of the fishery (e.g., rationalization). One can isolate these external impacts because one is simultaneously accounting for any changes in the other salient variables that affect harvesting costs.

The role of each variable in the model is identified by examining statistical correlations between its value and the associated outcome. The benefit of estimating the relationships in this way is that the strength of the correlations can be quantified in order to assess one’s confidence in the estimated relationships, or define a range of values in which the estimates are very likely to lie (“confidence intervals”). However, the precision of the estimated relationships is dependent on the number of data points (outcomes and their influential variables) one observes, and the confidence in, and precision of, estimates diminishes with fewer observations. In this way, it is typically the number of observations available to the analyst that limits the complexity and realism of a model, and one’s confidence in the conclusions that may be drawn.

As a result, by aggregating data on production decisions over one or more firms, one immediately diminishes a model’s ability to accurately characterize the relationships of interest as well as the certainty and precision of one’s estimates. Furthermore, restrictions not associated with the loss of observations are also imposed through aggregation. Specifically, rather than looking at individual decisions and the state of the factors that effect them, one looks at the net outcome of a multitude of decisions and states of nature. Reliance on a “representative” data set therefore masks reality, requires one to assume that all firms are affected identically.
by changes in the influential variables, and necessitates that large costs incurred by one firm and benefits gained by another go unaccounted.

It is worth emphasizing, however, that the benefits of firm-level data in models (increased precision, robustness, and confidence in the estimated relationships) need not be offset by concerns regarding the release of the confidential data when the results of the model are reported. One can present results of a models at various levels of aggregation (focusing on groups of interest) -- as though the firm-level detail was never there. The essential difference, however, is that much more information (based on actual decisions) went into establishing the relationships described by the model, even though the level of sensitive detail shown in the model results is identical.

**Bias Arising from Incorrect Aggregation**
Up to this point, the discussion has centered on the limited analyses that can be conducted with aggregate data, and has not focused on issues related to the way in which data are aggregated. These issues have their roots in economic theory, and are therefore more difficult to convey without use of mathematics, but can be summarized as follows. There are assumptions implicitly made when one groups together multiple vessels or plants, which, if incorrect, can severely bias the results of the economic model one is constructing. Typical assumptions that must hold, for example, are that all plants/vessels and decision making entities are "identical" (in terms of their costs, risk preferences, the type of technology they use, etc.). When such assumptions are not valid, the aggregation leads to erroneous results.


**An Empirical Example of Aggregation Bias**
The literature cited above contains many examples of aggregation bias, but in an attempt to provide an example directly related to the fishing industry (and crab in particular), we provide the following. In October 2002, the Alaska Fisheries Science Center compiled a report that provided quantitative estimates of fishing capacity for the vessels that participated in federally managed Alaskan fisheries in 2001 (NMFS, 2002). The estimates computed in the report used vessel-level data to estimate what each vessel could have caught, by species, if they targeted the same species as in 2001, but fished the maximum number of weeks they had ever fished (over the 1990-2001 period). Once estimates were computed for each vessel, vessels were categorized according to vessel type, gear and other factors (e.g., target species, vessel length, license type). Table 3-7.8.1 below shows the capacity estimates for the group of catcher vessels using pot gear for Pacific Cod and crab. Estimates in the “Disaggregated Data” column were computed with individual vessel observations, using the methodology described above. Estimates in the “Aggregate Data” column were computed by taking the means for each of the variables used in the former calculations to create an aggregate capacity estimate for each species.
Table 3-7.8.1 Capacity Estimates Based on Aggregated and Disaggregated Data

<table>
<thead>
<tr>
<th>Species</th>
<th>Aggregate Data</th>
<th>Disaggregated Data</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific Cod</td>
<td>25,869.4</td>
<td>27,781.0</td>
<td>-6.9%</td>
</tr>
<tr>
<td>Golden King Crab</td>
<td>3,656.3</td>
<td>4,930.0</td>
<td>-25.8%</td>
</tr>
<tr>
<td>Red King Crab</td>
<td>4,623.8</td>
<td>12,104.0</td>
<td>-61.8%</td>
</tr>
<tr>
<td>Tanner Crab</td>
<td>13,691.3</td>
<td>35,495.0</td>
<td>-61.4%</td>
</tr>
</tbody>
</table>

As can be seen in the third column, the capacity estimates based on aggregated and disaggregated data are substantially different (especially for each crab species). Although the potential bias that may arise in a model is dependent upon the degree of heterogeneity in the fleet under study (which is masked by only examining means or totals), it is evident that the crab fleet has enough heterogeneity to be affected. With that in mind, the potential for creating such biases through aggregation represents a significant concern that should be considered when designing and implementing the mandatory data collection.

References


Report of the Captains QS Committee to the Council

Key Aspects of the Committee's Preferred Program

- C shares are allocated from the TAC remaining after the CDQ allocation and are independent of and will not affect the 90/10 Class A/Class B harvest share split.
- C shares will not be subject to Class A type delivery restrictions and will not be subject to regional designations
- Eligibility will be based on historical and recent participation
  - Historical participation - landings in the 3 of the qualifying years
  - Recent participation - landings in 2 of the 3 most recent seasons
- Qualifying years will be the same as those used for vessel based allocations
- Limited leasing will be permitted to avoid forced divestiture in seasons with low TACs
- C shares will be transferable to only active participants
- C shares will be subject to owner on board requirements
- A loan program to support captain and crew share purchases
- Any shares purchased with funds from the loan fund will be subject to owner on board requirements during the term of the loan
- National Marine Fisheries Service (NOAA Fisheries) is requested to explore options for obtaining seed money for the program in the amount of $250,000
- C/P captains will be allocated shares with harvest and processing privileges

Following are the options proposed by the committee for Council consideration. The committee's preferred option is bolded. After each option, the committee's rationale for the inclusion of the options and the rationale for the preferred option are provided. The committee unanimously supported not only the preferred program, but also each element of the program.

1.8.1 Options for captain and crews members:

1.8.1.2 Percentage to Captain:

1. Initial allocation of 3% shall be awarded to qualified captains as C shares.
   a. Allocation from QS pool
   b. Allocation is from each vessel's allocation to the skipper on the vessel

Option a would set aside 3 percent of the total QS pool for allocation to qualified captains as C shares. Option b would make up to 3 percent of the QS awarded to any vessel available to qualified captains that fished on that vessel during the qualifying period. Option b was advanced as a means to ensure that the total allocation to each vessel would be unaffected by the program since the allocation would go to the vessel and its captains. Whether a vessel's allocation remains whole, depends on whether the captain remains with the vessel where the allocation is from.

On balance, the committee believes that the allocation of C shares from a set aside portion of the QS pool is equitable, administratively simple, and conducive to good captain/vessel owner relations, which benefit all participants in the fishery.
The option to allocate 3 percent of the QS pool to captains is supported by the committee for several reasons. First, this allocation would distribute the burden of C shares equally among all vessel owners. Allocation on a vessel basis would not be distributed equally among all vessel owners but would burden vessel owners that maintained a single captain during the qualifying period the most. In addition, allocation of 3 percent of the QS pool is the only way to ensure that 3 percent of the total pool is allocated to captains in perpetuity. A vessel based allocation would allocate a maximum of 3 percent to captains. Landings by ineligible captains would reduce the total C share allocation from 3 percent.

The allocation of 3 percent of the QS pool to captains simplifies administration of the allocation. Administration of the allocation on a vessel basis would be cumbersome since it would require that a vessel's allocation be finalized prior to finalizing the allocation to its captain.

Allocation of a portion of the QS pool to captains would also be more equitable since a captain's allocation would be based solely on the activities of the captain, independent of the vessels on which the captain fished. For example, allocation on a vessel basis would preclude eligible captains that fish on unqualified vessels from getting an allocation. Landings on unqualified vessels occur when the vessel operates on an interim permit. These landings are legal; however, if allocations are on a vessel basis the captain would not be rewarded since no vessel allocation exists.

An additional benefit of deriving the C share allocation from the QS pool is that it will help build captain/vessel owner relations. Since a captain's allocation comes from a general pool the vessel owner's allocation is not affected by the captain's allocation. Under this system a vessel owner will maximize the total number of shares fished on a vessel by obtaining the largest allocation for the captain. So, a vessel owner and captain have a common interest in maximizing the allocation to the captain. If the captain's allocation comes only from the vessel that the captain fished on, the owner of that vessel would have an interest directly opposed to the captain and could damage vessel owner/captain relations. Under that system, a vessel owner's allocation would be maximized by minimizing its captain's allocation.

The vessel based allocation is also likely to reward vessel owners with a history of poor relations with captains. A vessel that does not retain a captain could have prevented that captain from qualifying. The allocation that would go to the captain would then remain with the vessel. If the captains allocation is from the QS pool as a whole, the captain's own activities determine the allocation. Captains unable to maintain good relations with vessel owners would receive shares based strictly on their participation, which is likely to be compromised by those poor relations.

1.8.1.3 Species specific:
1. As with vessels.

C shares will be categorized by fishery. This is necessary for a complete allocation of harvest shares in each fishery.

1.8.1.4 Eligibility:

Option 1

1. A qualified captain is determined on a fishery by fishery basis by
1) **having at least one landing in**
   a) 1 of the qualifying years used by the vessels
   b) 2 of the qualifying years used by the vessels
   c) 3 of the qualifying years used by the vessels and

2) **having recent participation in the fishery as defined by at least**
   a) one landing per season in the fishery in the last two seasons prior to June 10, 2002.
   b) one landing per season in the fishery in one of the last two seasons prior to June 10, 2002.
   c) one landing per season in the fishery in two of the last three seasons prior to June 10, 2002.

**Suboption:** For recency in the Adak red king, Pribilof, St. Matthew, and bairdi fisheries a qualified captain must have at least

a) one landing per season in the opilio, BBRKC, or AI brown crab fisheries in the last two seasons prior to June 10, 2002 (operators of vessels under 60 feet are exempt from this requirement for the Pribilof red and blue king crab fishery).

b) one landing per season in the opilio, BBRKC, or AI brown crab fisheries in one of the last two seasons prior to June 10, 2002 (operators of vessels under 60 feet are exempt from this requirement for the Pribilof red and blue king crab fishery).

c) one landing per season in the opilio, BBRKC, or AI brown crab fisheries in two of the last three seasons prior to June 10, 2002 (operators of vessels under 60 feet are exempt from this requirement for the Pribilof red and blue king crab fishery).

2. A captain is defined as the individual named on the Commercial Fishery Entry Permit.

For captains who died from fishing related incidents, recency requirements shall be waived and the allocation shall be made to the estate of that captain. All ownership, use, and transfer requirements would apply to C shares awarded to the estate.

**Option 2**

**Point System**

Point system-following alternative is provided:

1) Participation 1996-2001
   Qualified by delivery in at least two different species
   (Maximum 36 points)
   
   **Graduated Scale weights most recent participation**
   
<table>
<thead>
<tr>
<th>Year</th>
<th>Points Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>7 points</td>
</tr>
<tr>
<td>2000</td>
<td>7 points</td>
</tr>
<tr>
<td>1999</td>
<td>6 points</td>
</tr>
<tr>
<td>1998</td>
<td>6 points</td>
</tr>
<tr>
<td>1997</td>
<td>5 points</td>
</tr>
<tr>
<td>1996</td>
<td>5 points</td>
</tr>
</tbody>
</table>
2) **Consistent Participation 1996-2001**  
Qualified by making total catch in a season for two different species  
(Maximum 24 points)  
4 points for each year

3) **Vessel Ownership**  
(As of January 1, 2002)  
(Maximum 6 points)

<table>
<thead>
<tr>
<th>% of Ownership</th>
<th>Points Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-50%</td>
<td>4 points</td>
</tr>
<tr>
<td>51-75%</td>
<td>5 points</td>
</tr>
<tr>
<td>76-100%</td>
<td>6 points</td>
</tr>
</tbody>
</table>

*This could be used to qualify captains as a general group or on fishery by fishery basis.*

The Council motion previously contained a single option for qualification for a C share allocation. That option contained a recency requirement for eligibility of having one landing in each of the last two seasons in a fishery. The Council received letters from a few long term captains that continue to participate stating that this rigid requirement would make them ineligible. The committee elected to add options that would reduce the recency burden. The committee also chose to add recency options for the Adak red king crab, Pribilof red and blue crab, St. Matthew blue king crab fisheries, which have been closed in recent years. The new options for the closed fisheries would require a captain to have recent landings in another BSAI crab fishery.

The committee also chose to add options to increase the requirements for historical participation by adding a requirement for landings in more than one of the vessel qualifying years.

Option 2 is uses a point system to determine eligibility. This system could also be used to determine allocations. Since the point system has no crediting of catch. Allocations are based solely on participation, which would be verified with fish tickets. The committee believed that a well-crafted point system could be a workable alternative for allocating C shares. This draft of a point system is clearly a first cut and is offered as an alternative only if the Council feels that one should be considered. The committee felt that the participation based method addresses the eligibility determination issue.

1.8.1.5 Qualification period:  
1. As with vessels.

1.8.1.6 Distribution per captain:

1. C QS based on landings (personal catch history based on ADF&G fish tickets) using harvest share calculation rule.

Regionalization and Class A/B Designation

Option 1: C shares shall be a separate class of shares and not be subject to Class A share delivery requirements.

Suboptions  

a. This allocation shall be made off the top and shall not affect the Class A/Class B share split for harvest shares. C
shares shall not be subject to regional designations.

b. This allocation shall be made from the harvest Class B shares. C shares shall not be subject to regional designations.

Option 2: C shares shall be a separate class of shares but shall be subject to the Class A/Class B split and any related delivery requirements associated with the parallel harvest shares. C shares shall be subject to regional designations.

Option 3: C shares shall be a separate class of shares and shall all be subject to Class A share delivery requirements.

Option 4: C shares shall not be regionally designated or have an IPQ delivery requirement, but when used shall be delivered with the same regional distribution as the harvest shares used on the vessel on a season by season basis.

Initial Allocation Regionalization

If C shares are regionalized, at the initial allocation regional designations shall be made based on the captain's history, with an adjustment to the allocation to match the PQS regional ratio made based on the same scheme used for regional adjustment of harvest shares.

The committee considered possible C share delivery designations (i.e., whether C shares should have Class A or regional delivery designations). The committee’s preferred option is that the C shares have no delivery restrictions because those restrictions could substantially reduce a captain’s market for using C shares (at no loss to any processor or region). Since many captains do not own vessels, captains could use their shares to obtain fair contracts for their services. Delivery restrictions could limit the ability of a captain to work on vessels that do not have shares with corresponding delivery restrictions. Since C shares are intended to be a long-term asset with limited leasing, flexibility in delivery is necessary for those shares to provide captains with the contract negotiating leverage intended to be created by the shares. Since the C share allocations are a small portion of the total harvest share allocation, captains cannot feasibly make deliveries except with the vessel carrying Class A and B harvest shares. Consequently, C shares without processor or regional delivery restrictions can be expected to be landed with a similar distribution to Class A and B harvest shares. C shares will have limited leasing flexibility and ownership caps, which would prevent captains from amassing enough shares to make even a single harvest delivery. Hence, maximum delivery flexibility is needed to accommodate C share use.

If the Council favors regionalization of C shares, the committee supports alternative means of regionalization (such as Option 4) rather than attaching specific regional designations to shares.

1.8.1.7 Transferability criteria:

1. Purchase of C QS.
   a. C QS may be purchased only by persons who are
      Option 1. US citizens who have had at least 150 days of sea time in any of the US commercial fisheries in a harvesting capacity and
      Option 2. active participants

An "active participant" is defined by participation as captain or crew in at least one
delivery in a crab fishery included in the rationalization program in the last 365 days as evidenced by ADF&G fish ticket or affidavit from the vessel owner.

The committee supports the use of both eligibility criteria. Eligibility requirements for transfers should ensure that C shares are transferred only to active participants in the BSAI crab fisheries that have substantial fishing experience. C shares should be used to ensure that crew committed to these fisheries receive fair and equitable crew shares. This will enable these captains and crew to advance in the fishery. Fishers without experience in these fisheries and a minimum level of fishing experience should not be permitted to obtain C shares.

2. C share leasing
   a. C QS are leasable for the first three seasons a fishery is prosecuted after program implementation.
      Suboption: limit to the following fisheries only:
      Pribilof red and blue crab and St. Matthew blue crab
   b. In cases of hardship (injury, medical incapacity, loss of vessel, etc.) a holder of C shares may lease C QS, upon documentation and approval, (similar to CFEC medical transfers) for the term of the hardship/disability or a maximum of 2 years over a 10 year period.

The committee supports leasing provisions that permit some flexibility to avoid forced divestiture of shares. This should include leasing of shares between active participants to facilitate fleet downsizing within fisheries with low TACs without forcing captains that remain active to divest.

An additional option should be considered to permit 2 years of leasing by any C share holder. This will allow C share holders the flexibility to make decisions on future participation, movement among fisheries, and exit from all fisheries at retirement. Permitting leasing could also stabilize C QS prices during periods of particularly high or low abundance. Leasing provisions should be carefully drafted to prevent abuse.

1.8.1.8 Loan program for crab QS
   A low-interest rate loan program consistent with MSA provisions, for skipper and crew purchases of QS, shall be established for QS purchases by captains and crew members using 25% of the Crab IFQ fee program funds collected. These funds can be used to purchase A, B, or C shares.

   Loan funds shall be accessible by active participants only.

   Any A or B shares purchased under the loan program shall be subject to any use and leasing restrictions applicable to C shares (during the period of the loan).

   National Marine Fisheries Service (NOAA Fisheries) is directed to explore options for obtaining seed money for the program in the amount of $250,000 to be available at commencement of the program to leverage additional loan funds.

The committee supports the loan program. In addition, the committee recommends that the initial funding of $250,000 be sought, which would be available for loans on
implementation of the rationalization program. Development of funding through the cost recovery program could take as long as three years and significantly affect both purchasers and sellers of C share holders. The proposed initial funding could be used to finance loan money of approximately $25 million, which would provide stability to the C share market from the outset. The committee supports active participation in the fisheries by any purchaser of shares during the life of any loan used to purchase the shares.

Several details of the loan program will need to be specified prior to implementation of the program. Eligibility criteria for loans, maximum loan amounts, any limitations on the number of shares that can be purchased with loan money all must be determined. The committee requests that the Council direct the committee to continue to work to develop the details of the loan program.

1.8.1.9 Captain/Crew on Board requirements
1. Holders of captain QS or qualified lease recipients are required to be onboard vessel when harvesting IFQ.
2. C QS ownership caps for each species are
   Option 1. the same as the individual ownership caps for each species
   Option 2. the same as the vessel use caps for each species
   Option 3. double the vessel use caps for each species

C share ownership caps are calculated based on the C QS pool (i.e. section 1.7.4). Initial allocations shall be grandfathered.

Options 2 and 3 were added to allow the pool of participating captains to be reduced to the same level as the participating vessel pool in each fishery. Use caps higher than ownership caps should be considered to permit leasing by individuals over the ownership cap.

3. Use caps on IFQs harvested on any given vessel shall not include C shares in the calculation.

By exempting C shares from use caps, captains are provided greater mobility and flexibility to move throughout the fleet.

1.8.1.10 C/P Captains
Captains with C/P history shall receive C/P C QS at initial issuance. C/P C shares shall carry a harvest and processing privilege.
Option 1. The same rule applies to C/P C QS if they leave the C/P sector as in section 1.7.2.4.
Option 2. C/P C shares shall be useable only on C/Ps.
Option 3. C/P C shares may be harvested and processed on C/Ps or harvested on catcher vessels and delivered to shore based processors.
Option 4. If C shares are not subject to IPQ delivery requirements, C shares may be harvested and processed on C/Ps or harvested on catcher vessels and delivered to shore based processors.
The committee supports maximum flexibility in the provisions affecting catcher/processors to permit captains to make the best use of C shares. The committee supports historic participation of the catcher/processor sector in the fishery and believes C share provisions should recognize and retain that historic participation.

1.8.1.11 Cooperatives
C share holders shall be eligible to join cooperatives.

Permitting C share holders to join cooperatives is necessary to ensure that captains are able to the make the best use of their C shares.

Binding Arbitration

The committee supports binding arbitration and the inclusion of C shares in that process.

Data collection

The committee fully supports data collection and will provide assistance to that process.
November 19, 2002

Chairman David Benton
North Pacific Fishery Management Council
605 West 4th, Ste 306
Anchorage, AK 99501-2252

Dear Chairman Benton,

The Deep Sea Fishermen's Union of the Pacific (DSFU) continues to expand its membership with the addition of crab skippers and crewmen. As you are aware, we have been actively representing both groups since March, 2002.

On several instances in testimony and in writing we have offered our strong support for the implementation of an IFQ-purchase loan program for skippers and crew as a part of the Crab Rationalization Process under consideration by the Council. The report from the trailing amendment committee that dealt with skippers and crew received and approved by the Council in its October, 2002 meeting also emphasized the importance of this program.

As the Council continues its deliberative efforts in its December, 2002 meeting, we would respectfully request that it continue this support and adopt verbiage that calls for modification of the portions of the Magnuson-Stevens Act (MSA) that relate to the loan program. The portion needing modification is section 303 (d)(4). This section places a probably unintended limitation on this IFQ loan program by noting that is for "fishermen who fish from small vessels" and "first time purchase of individual fishing quotas ... by entry level fishermen."

These are clearly at odds with what we want to accomplish for the provision of funds to purchase IFQ in the BSAI crab fishery. We would recommend that section 303(d)(4) be modified to simply substitute "vessel captains and crewmen" for the fishermen who fish from small vessels and the entry level fishermen making first time IFQ purchases. This would best be accomplished by striking everything in sub-paragraph (A) of section 303(d)(4) after the words "financing the" and replace the stricken language with "purchase of individual fishing quota in that fishery by the captains and crewmen of vessels in that fishery." This amendment would also require amending sub-paragraph (B) of section 303 (d)(4) by striking from sub-paragraph (B) the words "clauses (i) and (ii) of."
Additionally, we would encourage the Council to continue its support for a $250,000 appropriation to jump start the program. Several influential members of Congress have expressed strong support for this appropriation. The Federal Credit Reform Act (FRCA) provides an option of only having to fund the 1% needed to operate the program that cannot be collected by the agency administering the program. FRCA places the federal loan programs on the same budgetary basis as other federal spending. Prior to FRCA, if Congress wanted to authorize the $25 million we want enabled for this program-Congress had to appropriate the entire amount. This is not good budgeting methodology because the only portion of the $25 million that would actually be “spent” was the portion that the federal lender estimated it would be unable to collect.

After FRCA, Congress is fully empowered to authorize loan program of say $25 million by appropriating merely the portion of the $25 million in loans that the federal lender estimates it would be unable to collect. Since our experience with the current loan program shows that this portion is 1% or less, then the FRCA cost rate for a $25 million loan ceiling authorization is also 1% and Congress need only appropriate $250,000 (that is 1% of $25 million). Borrowers will repay the other $24,75 million and it will not consequently constitute “spending.”

As previously noted, the halibut/sablefish IFQ-purchase loans have proven to have no FRCA costs at all and indeed are making a profit. However, we understand that fiscal prudence is addressed by, at least initially, appropriating FRCA cost at 1% for BSAI crab IFQ-purchase loans in the event that program does not perform as well as those in the halibut/sablefish fishery. We would reiterate that absolutely no evidence exists that indicates this would be the case. Since it is now difficult to fathom what BSAI crab IFQ would cost and in the event that it took more than one year to use the $25 million loan authorization-the authorization should specify that the loan ceiling would remain available until expended. To do otherwise could mean that any portion of the $25 million loan ceiling not used during the first year of its authorization would lapse at the end of the first year. Obviously, that is not a desirable outcome.

This provides the wherewithal for crab skippers and crew to quickly establish an equity position in the newly rationalized fishery. It acknowledges the immense contributions made by them to the crab industry. We would strongly recommend the Council continue to support this IFQ-purchase loan program and that the final version of the language approved by that body unambiguously expresses that support in the manner indicated in this correspondence. Thank you in advance for your assistance. The Union’s point of contact for this effort is its Executive Director, Beau Bergeron. He can be reached at (206) 783-2922 or email beau@dsfu.org.

Yours in solidarity,

Pat Hunter
President
Proposal Re: Rationilazation of Crab and Groundfish
Fishermans Insurance Fund.

Terry Haines
P.O. Box 8112
Kodiak, AK 99615
907-486-4759
My proposal is to create a fisherman's insurance fund from a 12% share of each rationalized fishery. This fund would have two kinds of participants: shareholders and qualified customers.

Shareholders would be awarded shares, like shareholders in a native corporation. They would receive shares based upon participation in the fishery during the qualifying years. So, for five qualifying years, one share for one year's participation would be the minimum, five shares for five years the maximum. In this way, a crewman who participated in different winter fisheries (i.e. opilio crab, Pacific cod, Oregon dungeness) could be awarded appropriate shares as each fishery is rationalized, based on participation.

Documentation for shareholders would consist of a form filled out by the applicant specifying the boat worked for and the years worked. The boat owners would then be sent a form to certify the information. If contested, tax documents could be easily obtained which would show who was paid, and when, and clear up any haziness.

The mandate of the fund would be to provide insurance, and eventually low cost loans, to the fishing community at large. Qualified clients (commercial fishers) would get low-cost insurance, subsidized by the fund. Shareholders would receive a yearly dividend based on the performance of the fund, minus the cost of providing insurance. Or they could simply receive a package of zero-cost insurance products.

Fishers (shareholders and clients) for each fishery would qualify as soon as his fishery was rationalized, and thus contributing to the fund.

Three factors make this plan fair and viable. It is simple: shareholders would be identified on the basis of "Was I there?", and, once identified, the paperwork would be over. It is fair: shareholders would be rewarded based on past participation and inclusion in the insurance program should be offered to all commercial fishermen presently participating in the rationalized fishery. Fifty percent of the fund's revenues should be reserved for subsidizing insurance for every fisher in the fishery. And lastly it spreads the benefit of privatization of the resource more evenly, and will better assure a stable, healthy fishing community.

This fund could take the burden of providing liability insurance on the boat from the owners. A deckhand with his own insurance from the fund would be one less thing for the owner to worry about. And the taxpayer won't have to foot the bill if he's hurt on land.

The fund could be administered by a professional with experience managing a native corporation or perhaps rural electric association. The resource would be harvested by commercial boats through a bid process, just like C.D.Q.s.

C.D.Q.s have been awarded to communities for the purpose of stabilizing them and improving quality of life. Why not award the community of deckhands, a community which has been so intimately connected to the fishing world, a bit of the resource for the same purpose?
The Captains Quota Share Committee met twice this summer and completed its tasks, and voted unanimous on its recommendations. Of particular interest to ACC vessel owners, are three major committee recommendations:

1. The initial allocation of 3% would be set aside from the total QS pool for allocation to qualified captains as C shares (rather than allocated individually from a vessel's catch history, on a vessel by vessel basis). This seems to be not only a fair and equitable approach to the allocation, but it also simplifies administration of the program. As the analysis already notes, first, this allocation would distribute the burden of C shares equally among all vessel owners. Allocation on a vessel basis would not be distributed equally among all vessel owners but would burden vessel owners that maintained a single captain during the qualifying period the most. In addition, if the Council's intention is to allocate 3 per cent of the QS pool to captains, taking that allocation directly from the QS pool is a fair and equitable approach to making the allocation.

2. C shares shall be a separate class of shares and not be subject to Class A share delivery requirements. Also, this allocation shall be made off the top and shall not affect the Class A/Class B share split for harvest shares. C shares shall not be subject to regional designations. (Skippers are recommending that C shares be open access shares and that this allocation should not affect the A/B share split of vessel owners.) As the analysis notes, imposing A/B share classifications and regionalization on C shares will create mismatches with vessel owners QS and could result in forcing skippers to divest of their shares. Requiring A/B share and regionalization designations to skipper shares will also overly complicate the operation of the program, as there are going to be more than 200 eligible skippers in the program. Skippers are in many cases, independent contractors. Skippers
histories will oftentimes conflict with vessel designations. This will multiply with leasing and consolidation into cooperatives. In the future, there will be more owners, as deckhands begin buying quota shares.

Another benefit of allowing C shares to be open access shares will be to improve overall price negotiation leverage for fishermen, as there will be a 3 per cent increase in open access shares.

3. A recommendation supporting the binding arbitration program and the inclusion of skippers in the binding arbitration process.

As a matter of practicality, skippers and vessel owners present at committee meetings agreed that the skipper shares, even without A/B and regionalization designations would follow the vessel in its delivery patterns and it is therefore unlikely the open access nature of the QS will negatively affect a region’s overall percentage of the TAC in deliveries.

Given the obvious benefits to price negotiations and for simplifying administration of the skipper allocations, the ACC is endorsing C shares coming off the top of the QS pool and that they be designated as open access shares.
November 21st, 2002

Mr. David Benton
605 West 4th Ave. Suite 306
Anchorage, Ak. 99501-2252

I just wanted to let you know that I do support the Captains Committee decisions on Captain Shares.

Although these small token shares of 3% isn't the best, at least it's something. But I do feel that the Captain Shares should not be encumbered with any Processor Tags and should be classified as a separate category of named C SHARES.

Sincerely, David Harris

Signature
Chairman David Benton  
North Pacific Fishery Management Council  
605 West 4th, Ste. 306  
Anchorage, AK 99501-2252

Dear Chairman Benton,

Skippers for Equitable Access (SEA), affiliated with the Deep Sea Fishermen’s Union of the Pacific (DSFU), would like to reiterate its support for the findings of the Captain’s Quota Share Committee in its report to the Council. We appreciate the opportunity to participate as members of that committee. Its deliberations were marked by a completely inclusive approach and very constructive dialogue.

The committee noted that the allocation of C shares from a set aside portion of the QS pool, off the top after CDQ and before the A and B share split, is an equitable and administratively simple method. It is also enhances captain/vessel owner relations and that benefits all involved in the fishery. After some detailed research and discussion the committee agreed that the option to allocate 3% of the QS pool worked well for a variety of reasons:

1-It distributes the burden of C shares among all vessel owners
2-It simplifies administration of the allocation
3-Vessel owners and captains have a common interest in maximizing the allocation to the captain

The committee also considered the full range of C share delivery designations. It voted unanimously to recommend that C shares have no delivery restrictions because those restrictions could substantially reduce a captain’s market for using C shares. Delivery restrictions on C shares could limit the ability of captains to work on vessels without corresponding delivery restrictions.

We fully support the committee’s expressed intent which was to ensure maximum flexibility and value for the C shares. It is also important to “size” C shares in the overall context of the crab fleet.
We have run numerous models with the assistance of Council staff and the bottom line remains that 3% C shares in the large majority of instances will equate to more than a brazier (estimated at 1,500-1,800 pounds) of crab for the captain. This is a small amount and will doubtless follow the vessel when the crab is sold.

SEA strongly supports the committee recommendations. That body worked very hard to ensure everyone's voice was heard and that their issues were accommodated. We think it was very successful and would urge your continued support for the report. Thank you for the opportunity to articulate our position on this key issue and please accept our gratitude, in advance, for your careful consideration and support.

Sincerely,

[Signature]

Walter Christensen
Vice President, SEA
Captain Keith H. Colburn  
3117 E Ames Lake Dr. N.E. Redmond WA. 98053

November 20, 2002

Mr. David Benton, Chairman  
North Pacific Fishery Management Council  
605 West 4th Avenue, Suite 300  
Anchorage, Alaska 99501

Re: C-1, Crab Rationalization, Captain’s QS Committee

Dear Chairman Benton,

I support the recommended elements, and options contained in the Captain’s Committee report. The unanimous approval of these recommendations mirrors that of the Council’s June vote, and should be strongly considered by all the Council members.

Approximately 9,562,000 pounds (#’s) of red king crab were recently harvested in the Bering Sea. If the committee’s preferred alternative is adopted by the Council, the average captain would have had an allocation of 1,150 #’s of crab, roughly ½ a brailer at the dock. Utilizing Co-Op's and leasing, only 50 vessels with an average catch per boat of 172,116#’s (after CDQs) would be necessary in a 2 week fishery. The committee’s recommendation would qualify 190 captains for a C-share allocation. However, fleet contraction will leave 140 captains without vessels to operate.

The only way to ensure that initial recipients of C-shares are not forced to divest or leave their shares on the table unfished, is by keeping C-shares unencumbered by Regionalization and IPQ designations, with leasing privileges in the first 3 years of the program.

The 90/10, Two Pie view of C-shares  
9,562,000#’s TAC  (2002 valuations $6.25 ex-vessel $13.75 FOB Seattle)

IPQ 90%  7,745,220#’s FOB Seattle  $66,918,701
C-Shares  258,174#’s Allocated to 190 captains with 1150#’s to the average captain.
C-Shares  1,035#’s IPQ restrictions per captain
C-Shares  115#’s unrestricted per captain Ex-vessel  $719

The 3% allocation to Captains in any fishery is unprecedented, but represents only ¼ of what the average Captain has historically earned in the BSAI crab fisheries. 1150#’s each!
The 90% allocation to Processors is unprecedented too. $66,918,701!
For C-shares to retain any value to captains, flexibility is vital.

Sincerely,
Keith H. Colburn
November 21, 2002

Dave Hanson, Chairman
NPFMC Crab Community Committee
605 West 4th, Suite 306
Anchorage, Alaska 99501-2252

Re: Cumulative Impacts on Northern Region Communities
Proposed Framework for Community Protection

Dear Dave:

The City of Saint Paul hereby submits its comments concerning BSAI Crab Community Protection and the work of your committee. Our Proposed Framework for Community Protection is our specific proposal for committee consideration. Prior to the meeting we will be submitting a second document titled "Potential Cumulative (Negative) Impacts on the Northern Region" which quantifies the potential impact of various Council alternatives.

We look forward to working with you and all of the other crab communities in our upcoming meetings.

Sincerely,

[Signature]
Simeon Swetzol, Jr., Mayor
Mayor

Attachment
Proposed Framework for Community Protection

The NPFMC and community and industry participants in the BSAI crab rationalization process have always held as one of their goals the preservation of current recent participants and their investments. In fact, the NPFMC has authored a rather revolutionary approach to this end in its “Three Pie Voluntary Cooperative” by recognizing harvesters, processors, skippers and crab communities.

The current scramble by some parties to gain a last-minute advantage also reminds us of the comments offered up by one of the NPFMC members:

“We will get this (BSAI crab rationalization) done when people realize they are not going to get more than they deserve.”

The NPFMC has already defined qualifying years, sector eligibility, geographic boundaries and a whole host of other program elements. We encourage everyone on the BSAI Crab Community Committee to now come together to get our work done.

Proposed Framework

Consistent with NPFMC direction to work within the framework of the April 14 motion, the June 10 motion and the October 4 clarifications, we offer up the following recommendations:

“Eligible communities” shall be defined as any community in which aggregate (community) landings exceeded 4% (four percent) of the species for which processor QS is awarded during the qualifying period. (April motion pg 16). The eligible community shall be a Borough if there is one, or a first or second class city if there is no borough (April motion, page 16)

Period used to determine regional percentages are as follows: the base years for determining processing shares and the base period for determining the share assigned to each region shall be the same (June motion, 3.2.5 (1))

“Community landings” for closed fisheries will be determined using a formula that mirrors “Processor Option One” as defined in the analysis. (April motion pg 16)

Transfers of IPQ out of a region are prohibited. (June motion pg 12)

“Cooling off period”: Processing quota earned in a community may not be utilized outside that community for a period of 1-2 years after implementation of the rationalization period. (October clarifications pg 4.) Adopt the 10% transferability rule(October clarifications) but strike the exemptions for Bairdi and Adak red King Crab and instead specify that this cooling off period must be applied equally to all species and QS rights in all regions, including all closed species, “B” shares, Skipper shares and CDQ shares. During the “cooling off” period, all crab must be landed consistent with the
"community landings" provisions as defined in the April motion, and further specified in the analysis in Table 3.6-1 as Processor Option One.

Community ownership of IFQ and IPQ: Adopt in its entirety the NPFMC’s language in the October 2002 clarifications titled “Alternative 3”, which provides for community ownership of both processor and harvester QS and establishes a definition of the community entities that would be eligibly to purchase and manage the QS.

First Right of Refusal: Adopt October 2002 NPFMC language (“First Right.../revised alternative”). Clarify that the exception (“...except those communities that receive a direct allocation...”) specifically excludes Adak only in the present framework. Adopt a 30-day timeframe for responses to balance community need with the private sectors right to sell or transfer its assets. We recognize that there may be several significant legal issues surrounding this provision and encourage the Committee to work out the details for the other alternatives.
CITY OF KODIAK
RESOLUTION NUMBER 02–26

A RESOLUTION OF THE COUNCIL OF THE CITY OF KODIAK PROPOSING A BERING SEA/ALEUTIAN ISLAND CRAB RATIONALIZATION COMMUNITY PROTECTION MECHANISM

WHEREAS, Kodiak has a long history of buying and processing all crab species harvested and delivered from the Bering Sea and Aleutian Islands (BSAI) for over 40 years; and

WHEREAS, Kodiak processors were the initial developers of BSAI crab fisheries from the 1940s through the 1970s; and

WHEREAS, Kodiak has always been a leader in competitive pricing for live crab delivered from the BSAI; and

WHEREAS, Kodiak has suffered economically, similar to other shore-side crab processing communities, since the collapse of crab stocks in the mid-1980s; and

WHEREAS, there is evidence that crab resources will rebound during the cold-water phase of the Pacific decadal oscillation; and

WHEREAS, the historical harvest of BSAI crab that has been delivered to and processed in Kodiak year after year has had a significant, positive impact on the Kodiak economy; and

WHEREAS, the processor quota share and regionalization provisions of BSAI crab rationalization significantly reduce the opportunity for BSAI crab harvesters to deliver to shore-based processing plants in Kodiak; and

WHEREAS, the recent 2002 BSAI crab fishery exemplifies the importance and value of this fishery for the Kodiak economy;

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Kodiak, Alaska, that for the purposes of Bering Sea and Aleutian Islands crab rationalization, all deliveries of harvested live crab to Kodiak's shore-side processors should be exempt from any requirement to sell to specific processors and /or in specific geographical areas.

BE IT FURTHER RESOLVED that if BSAI crab rationalization is implemented, Congress is urged to pass legislation, regardless of any other rationalization provisions, that allows BSAI crab harvesters to deliver any amount of crab they choose to Kodiak shore-side processing plants, thus making Kodiak an open port.

CITY OF KODIAK

Carolyn L. Floyd
MAYOR

ATTEST:

Selma M. Marler
CITY CLERK

Adopted: October 24, 2002
David Benton  
Chairman, North Pacific Fishery Management Council  
605 West 4th, Suite 306  
Anchorage, Alaska 99501-2252

Dear Dave:

This letter responds to the request of the North Pacific Fishery Management Council (Council) at its October 2002 meeting that NMFS and NOAA General Counsel examine the question of whether the November 2002 preliminary draft Environmental Impact Statement for BSAI Crab Fisheries (draft EIS) contains an adequate range of reasonable alternatives consistent with the CEQ regulations for implementing the National Environmental Policy Act (NEPA).

Under CEQ regulations and case law interpreting NEPA, only reasonable alternatives are required to be considered in an EIS. Reasonable alternatives within the range dictated by the nature and scope of the proposal must be examined. The adequacy of an EIS can be challenged if a reasonable alternative exists but is not examined or is not represented among the analyzed alternatives. In determining whether an EIS considered reasonable alternatives, courts will look closely at the objectives identified in an EIS’s purpose and need statement. A court’s evaluation of the choice of “reasonable alternatives” is made by asking two questions – (1) whether the objectives are reasonable and (2) whether a particular alternative is reasonable in light of those objectives. While courts will give considerable deference to the Council’s and NMFS’s expertise and policy-making role in defining the action’s objectives, courts will not allow the Council and NMFS to define the objectives of an action so narrowly as to preclude a reasonable consideration of alternatives.

When a reasonable set of objectives is defined, those objectives delimit the universe of reasonable alternatives to satisfy the stated purpose and need. An alternative is properly excluded from consideration in an EIS only if it would be reasonable to conclude that the alternative does not bring about the ends stated in the purpose and need. NEPA does not require detailed analysis of alternatives that do not accomplish the purpose of an action, i.e. alternatives that are too remote, speculative, impractical, or ineffective. However, a reasonable explanation must be included in the EIS as to why those alternatives were eliminated from further study.

Given the above, we examined the objectives contained in the purpose and need section of the draft EIS. Most of the statements made in the purpose and need section support a determination that...
proposed action is the rationalization of the BSAI crab fisheries. The purpose and need section also specifies the objectives that a rationalization program must satisfy. These objectives are clearly stated in the Council’s Problem Statement:

The problem facing the Council, in the continuing process of comprehensive rationalization is to develop a management program which slows the race for fish, reduces bycatch and its associated mortalities, provides for conservation to increase the efficacy of crab rebuilding strategies, addresses the social and economic concerns of communities, maintains healthy harvesting and processing sectors and promotes efficiency and safety in the harvesting sector. Any such system should seek to achieve equity between the harvesting and processing sectors, including healthy, stable and competitive markets.

The draft EIS currently contains three alternatives: the no action/status quo alternative; a voluntary three-piece cooperative program alternative; and a no fishing alternative. The purpose and need section includes an explanation as to why the Council believes the voluntary three-piece cooperative program alternative satisfies all of the objectives of the proposed action. Alternative 1, the no action alternative, is described as “the continuation of the current Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs (FMP), and all activities authorized under the FMP, the current suite of FMP management measures, as amended over the years, and the State of Alaska and Federal regulations developed to implement those measures.” Alternative 3 is described as “an FMP that would close the BSAI to commercial crab fishing for all species covered under the FMP.”

The draft EIS was originally intended to be a programmatic analysis of the BSAI King and Tanner Crab FMP. Therefore, the no action/status quo alternative was described broadly as all of the activities authorized under the FMP, consistent with the scope of an FMP programmatic review. Alternative 3 was included as a programmatic approach to managing the BSAI crab fisheries that would sharply define the issues and provide a clear basis for choice among options by the decision-makers and the public.

As described above, however, the proposed action only consists of developing a program to rationalize the BSAI crab fisheries. Given the stated scope of this action, alternatives that examine the BSAI Crab FMP in its entirety are overly broad. In keeping with the stated scope of the action and the objectives as described in the purpose and need section of the preliminary draft EIS, we recommend that Alternative 1 be modified to the existing limited access component of the BSAI King and Tanner Crab FMP, i.e. the BSAI crab license limitation program. Alternative 3 does not appear to meet all of the objectives of the stated scope of the action and the Council should determine whether this alternative continues to be a reasonable alternative.

Furthermore, the Council has examined or has been presented with other alternatives in the Bering Sea Crab Rationalization Program Alternatives document (also called the Council Analysis document). These alternatives are not currently included as alternatives in the draft EIS. The draft EIS should
include an explanation as to why these other alternatives do not satisfy the stated purpose and need. The objectives set forth in the purpose and need section are fairly broad objectives, and do not appear to narrow the field of reasonable alternatives. At this point, however, only one alternative, the voluntary three-pie cooperative program, has been identified by the Council as meeting the objectives of the proposed action. If other alternatives meet the objectives set forth in the purpose and need statement, they should be evaluated in the draft EIS.

At this time, we cannot determine whether the range of reasonable alternatives in the current draft EIS is adequate. We recommend that the Council explain why the other alternatives already evaluated or alternatives presented to the Council by the Advisory Panel or public do not meet the objectives.

Sincerely,

[Signature]

James W. Balsiger
Administrator, Alaska Region

cc: Steering committee members
    Diana Evans, NPFMC
    Jon Isaacs, URS
    Lisa Lindeman, GCAK
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<td>Jake Jacobsen</td>
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RATIONALIZATION: A DECKHAND'S PERSPECTIVE

Should the Tongass National Forest be given to Weyerhaeuser based on their history of harvesting trees there? Or should British Petroleum (a foreign company) be given the oil under the North Slope because they have drilled there in the past? Few Americans would go along with that. Yet now, according to the proposed crab rationalization plan, boat owners and large, mainly foreign processors will own every opilio crab that scuttles under the ice in the Bering Sea, a public resource, simply because they have harvested and processed them in the past. Why not ask Congress to mandate that Skippers and Red Lobster are to buy the crab?

Now it is being put forth as gospel that the future of management of every species, every fishery, is through "rationalization". So, a formerly public resource will be given to a few private citizens and watched over by a government bureaucracy. The Russian Mafia thrives in just such an environment.

And the really odd part is the exclusion of the people who actually harvest the resource. Commercial fishermen who work on deck will get nothing. The question that must be asked here is by what logical criteria were the owners and processors given the crab? If it is because of time, money and effort in the fishery then there is no reason to deny the deckworkers. They are independent contractors who work for a share of the product. They pay for fuel, bait and equipment. If for any reason the operation is unprofitable they don't make a dime, or could even lose money. The deckworker invests his time, his money, and a tremendous amount of effort for a chance to catch crab. Perhaps most importantly, he is there, on the grounds, a saltwater icle hanging off his chin, working 24 hour days, knocking ice out of the rigging so the boat doesn't sink. He is up to his elbows in the resource itself. This is a far cry from sitting in Seattle with a piece of paper tucked into a desk drawer that says "I own a boat". Strangely, though, skippers have been let in on the crab pie. Apparently if you have enough sense to stay inside, you get some.

The deckworker has no pension plan, no 401K. He is probably uninsured. If he has a safety net, he built it himself. The cannery workers will get some job security with the guaranteed processor shares. But, with the removal of the time constraint inherent in fair competition, the boat owner will no longer need a skilled crew to harvest the crab. It will be in his interests to take the crab as cheaply as possible, which will mean less crewmen, and less pay for those who stay. The whole arrangement illustrates perfectly why working people are dubious of the way government works. Those who can pay for it get representation. The rest of us do not.

If rationalization is inevitable, at least make it more fair. Add deckworkers to your formula. On average, deckhands pay 25% of a boat's operating expenses. If half that amount, 12.5% was put aside from each rationalized fishery, a fund could be created to benefit all deckhands. Whether this fund is used to provide cheap insurance, or as an unemployment type safety net, or simply disbursed to deckhands like a permanent fund, it would include the only excluded parties in this formula.
FISHERMAN'S INSURANCE FUND- A PROPOSAL

My proposal is to create a fisherman's insurance fund from a 12% share of each rationalized fishery. This fund would have two kinds of participants: shareholders and qualified customers.

Shareholders would be awarded shares, like shareholders in a native corporation. They would receive shares based upon participation in the fishery during the qualifying years. So, for five qualifying years, one share for one year's participation would be the minimum, five shares for five years the maximum. In this way, a crewman who participated in different winter fisheries (i.e. opilio crab, Pacific cod, Oregon dungeness) could be awarded appropriate shares as each fishery is rationalized, based on participation.

Documentation for shareholders would consist of a form filled out by the applicant specifying the boat worked for and the years worked. The boat owners would then be sent a form to certify the information. If contested, tax documents could be easily obtained which would show who was paid, and when, and clear up any haziness.

The mandate of the fund would be to provide insurance, and eventually low cost loans, to the fishing community at large. Qualified clients (commercial fishers) would get low-cost insurance, subsidized by the fund. Shareholders would receive a yearly dividend based on the performance of the fund, minus the cost of providing insurance. Or they could simply receive a package of zero-cost insurance products.

Fishers (shareholders and clients) for each fishery would qualify as soon as his fishery was rationalized, and thus contributing to the fund.

Three factors make this plan fair and viable. It is simple: shareholders would be identified on the basis of "Was I there?", and, once identified, the paperwork would be over. It is fair: shareholders would be rewarded based on past participation and inclusion in the insurance program should be offered to all commercial fishermen presently participating in the rationalized fishery. Fifty percent of the fund's revenues should be reserved for subsidizing insurance for every fisher in the fishery. And lastly it spreads the benefit of privatization of the resource more evenly, and will better assure a stable, healthy fishing community.

This fund could take the burden of providing liability insurance on the boat from the owners. A deckhand with his own insurance from the fund would be one less thing for the owner to worry about. And the taxpayer won't have to foot the bill if he's hurt on land.

The fund could be administered by a professional with experience managing a native corporation or perhaps rural electric association. The resource would be harvested by commercial boats through a bid process, just like C.D.Q.s.

C.D.Q.s have been awarded to communities for the purpose of stabilizing them and improving quality of life. Why not award the community of deckhands, a community which has been so intimately connected to the fishing world, a bit of the resource for the same purpose? Terry Haines, (907) 486-4759 e-mail yohaines@alaska.com www.4alaskaishers.com
Proposal on BSAI Crab Rationalization

Council members;

I propose the 20% down payment on federal loans to entry-level fishermen be waived for deckhands traditionally engaged in the fishery. If the down payment is a function of statute, the statute could be amended to allow financially challenged crewmen to remain in the fishery. Some of the funds from the 3% IFQ fee charged by RAM could be used for this purpose.

When loans were made available for crewmembers to buy into the IFQ longline fishery relatively few crewmen were able to attain them due to a lack of assets and available cash. This effectively shut out most deckhands. Many of Kodiak’s professional longline crewmen were forced into other professions and/or relocated to other areas. This diminished our available worker base and our community as a whole.

A vacant crew position is now often filled by an inexperienced deckhand, raising safety concerns. The Bering Sea crab fishery, being inherently more dangerous than longlining, is less risky when most crewmen are very experienced professionals. I feel an amendment to this statute would facilitate their continued presence in the fishery.

This plan should also be applied to the rationalization of the Gulf of Alaska.

I believe all communities with crewmen would benefit greatly if the crew didn’t have to relocate and were able to continue profiting in the fishery.

73 Bering Sea crab crewmen signed my petition for recognition and inclusion in the BSAI rationalization plan. I believe that if a waiver of down payment were obtained many of them would buy into the fishery. If that were our only inclusion it would be better than nothing at all.

The 265 citizens of Kodiak that signed my petition of support for crewmen also think we deserve to be recognized and included in the rationalization plan.

Thank you for your attention

Steve Branson
Box 451
Kodiak, AK
99615
example and sends a bad message to Washington DC if the Council is to go back and make modifications to areas as contentious as catch history calculation or throw out certain fisheries after the June vote. If I could have a perfect world, the Crab Rationalization Plan would not look like it does. However, in the spirit of compromise and with the resource, safety and the future of the crab fisheries at heart I strongly support the Plan. The Plan will not be perfect for anyone, but will benefit everyone. I ask that those individuals requesting the Council to modify the Plan consider this and be content with the benefit they are receiving and not set a bad precedent where allocations could be modified in the future for other fisheries.

In summary, the Adak red king crab fishery should be maintained in the Crab Rationalisation Plan with no modifications because of concerns for the resource, concerns for safety, the years used for catch history calculations are appropriate, and modifying the plan sets a bad precedent for the other crab fisheries.

Sincerely,

Kris Poulsen, Manager
F/V North Sea
David Benton, Chairman
North Pacific Fishery Management Council
Anchorage, Alaska

November 30th, 2002

RE: Agenda Item C-1 Crab Rationalization

Dear Mr. Benton,

I am the manager and part owner of a crab vessel that is qualified for the Adak red king crab fishery. Although it is possible that my vessel could be better off if this fishery is not rationalized, I ask the Council to not make any changes to the current rationalization plan for Adak red king crab, or any of the other crab fisheries included in the Plan.

I support the current rationalization plan for Adak red king crab because it will benefit the resource, it will promote safety, the years used in determining catch history are appropriate, and I believe it sets a bad precedent if the Adak red king crab portion of the Crab Rationalization Plan were modified.

My vessel just participated in the first Adak red king crab season this year since 1995. It will be disastrous for the resource if the fishery continues to be managed in the current fashion. The Alaska Department of Fish and Game (ADF&G) has the extremely difficult job of managing this fishery. Relative to the size of the quota, there is very high participation for this fishery and it is a difficult task indeed for ADF&G to ensure the quota is not exceeded. To help ensure this, regulations do not permit more than 40 pots per vessel. The damage those low pot limits do to the resource is likely very high. In addition, my vessel had to dump numerous legal crab overboard because the fishery was closed in such a rapid manner to ensure the quota was not exceeded.

This style of management damages the resource, is economically wasteful, and puts ADF&G in a very difficult situation. By maintaining Adak red king crab as part of the Crab Rationalization Plan, the current wasteful management system will be replaced with an IFQ management system. This will benefit the resource as soak times increase leading to much lower discard mortality. In addition, wasteful discarding of legal crab after the fishery closes to ensure the quota is not exceeded will not occur. Instead, each vessel will be able to manage their own individual quota in a rational manner.

Safety will also be promoted by maintaining the Adak red king crab fishery as part of the Crab Rationalization Plan. Crab fishing is one of the most dangerous jobs in the country and the short and stressful derby fisheries that just happened in Petrel Bank is no exception. The likelihood of injury or death to occur under circumstances such as these is much too high. It is also important to note that the Western Aleutian area often experiences extremely violent weather. By maintaining Adak red king crab as part of the Crab Rationalization Plan, vessels will be able to fish when conditions are safe. In addition, a much safer work environment will also emerge since there will no longer be derbies.

I believe the years used to determine catch history in the Adak red king crab fishery are appropriate. The last four years of the fishery were used for determining catch history. This is appropriate because it is the most recent period when the fishery was open (prior to the June Council motion). These are also the years that determine if a vessel qualifies for an Adak red king crab LLP. Anyone who received an Adak red king crab LLP will receive some quota or else they would not have gotten an LLP. I also feel there is no need to include more than four years for determining catch history. By going back further, the history gets older and does not provide the most recent snapshot of the fishery that the Council was attempting to achieve.

Lastly, I believe it sets a bad precedent if the Adak red king crab portion of the Crab Rationalization Plan were modified. Some vessel owners would like the years used to calculate catch history for Adak red king crab to be modified or for the fishery to be thrown out in total. The Council voted strongly 11-0 in favor of the Crab Rationalization Plan. This message has been well received in Washington DC. It sets a very bad
1. Draft Council Motion for Item C-5 BSAI Crab Rationalization: June 10, 2002

1.4.2

Opilio (EBS snow crab). Option 4. 1996-2000 (5 seasons), a. Best 4 seasons. This was an option that was analyzed and offered at the April meeting.

Bristol Bay red king crab. Option 3. 1996-2000(5 seasons), a. Best 4 seasons. This was an option that was analyzed and offered at the April meeting.


Pribilof red and blue king crab. Option 2. 1994-1998, b. Drop one season. This was an option that was analyzed and offered at the April meeting.

St. Matthew blue king crab. Option 2. 1994-1998, b. Drop one season. This was an option that was analyzed and offered at the April meeting.

Brown king crab (based on biological seasons) (Options apply to both Dutch Harber (EAI) and Adak western Aleutian Island brown king crab). Option 4. 96/97-2000/01 (all 5 seasons). This was never an option prior to the June Council meeting. Furthermore, this option was never analyzed and this is the only fishery in which the Council has not given the fishermen the option to drop a year. This despite overwhelming evidence below that this fishery was different, and suggestions regarding whether this fishery should even be included in the rationalization process.


ALL OF THE OPTIONS CHOSEN ALLOW FISHERMEN TO DROP AT LEAST ONE SEASON. THE BROWN CRAB FISHERY IS THE ONLY FISHERY IN WHICH THE FISHERMEN ARE REQUIRED TO USE ALL SEASONS.


On Page 5 the Executive Summary states: “The Aleutian Island golden king crab fisheries have received less effort than most of the other BSAI crab fisheries due to their remote grounds and the need for specialized gear for participation. Participation in these fisheries has increased in recent years and would likely increase further, if they were omitted from the rationalization program.” (emphasis added).
On Page 9 the Executive Summary states: “The allocations in the Aleutian Islands fisheries are the most concentrated. These fisheries are the most distant from processing and other support facilities, discouraging some participation. The golden king crab fisheries also require additional gear for longlining pots and have limited grounds, complicating entry to those fisheries... In the two Aleutian Island golden king crab fisheries, slightly more than 10 vessels would receive an allocation. The median allocation in the Western fishery, however, is more concentrated than the Eastern fishery. In the Western fishery, the four largest allocations are estimated to average approximately 22 percent of the total allocation. The median allocation in the fishery is estimated to be approximately 2.6 percent. In the Eastern fishery, the four largest allocations average approximately 16 percent, while the median allocation is slightly less than 8 percent.”

On Page 10: “The Aleutian Island fisheries, which have the least participants, are the most concentrated. In two of the three Aleutian Islands fisheries, six owners would receive allocations in excess of 10 percent of the total allocation.”

3. 16 USC 1851(a)(4).

“Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.”

4. Letter from 13 brown crab vessel owners in support of Option 5. 96/97-2001/02 (6 seasons). (a) Best 5 seasons.

The letter from the vessel owners is attached. It is important for several reasons. First of this is a letter commenting on the options before the Council at their June meeting (at least the options that were public at the time). Secondly, this letter describes the uniqueness of the fishery; a message that the Council received time and again during testimony. Finally, these 13 vessels represent a majority of the vessels in the brown crab fishery.

It is important that the public be allowed to comment on allocation options and know the options before them.
Rich Mezich  
7215-156 ST SW  
Edmonds, WA. 98026

May 20, 2002

Dave Benton, Chairman  
North Pacific Fisheries Management Council  
605 West 4 th Avenue, Suite 306  
Anchorage, Alaska  99501-2817

Re: Preferred Options For Aleutian Island Brown Crab Rationalization

Dear Mr. Benton,

This letter states the position of the owners of 13 vessels who participate in the Aleutian Island brown crab fishery. A list of vessel owners along with their signatures appears on the last page. Most of our vessels have long histories in this fishery and have made substantial investments in recent years to strengthen their crab catching abilities. The Aleutian brown crab fishery is critical to our economic viability.

We request that the council adopt the following options, which appear in the April 14, 2002, Draft Council Motion for item C-5 BSAI Crab Rationalization:

1) “1.3.1.1 Brown king crab (Al golden king crab) option.  
Option 1. Split into two categories: Dutch Harbor brown king crab and Western Aleutian brown crab.”

Distinct stocks have been identified in the Eastern and Western Aleutians. Having separate allocations in the two regions will ensure that those stocks can be properly managed. In addition, a single category of QS covering both regions will not properly reflect the catch histories of many participants who, for reasons of safety and economy, have fished only the Eastern Aleutians.

2) “1.4.2.7 Brown king crab (based on biological season)...Option 5. 96/97-2001/02 (6 seasons)  
(a) Best 5 seasons”

This fishery has a small number of LLP qualified vessels. It is critical not to further reduce the number of vessels that participate. Qualifying years 96/97-2001/02 will allow QS to be distributed among a greater number of LLP qualifying vessels.

3) “1.4.2.7...Suboption: Award each initial recipient QS based on: ... (b) historical participation in each region.”

Our vessels have had little participation in the Western region and forced participation there will greatly alter our historical fishing practices.

4) “1.6.3 Separate and distinct QS Ownership Caps”

In 1.6.3, under (d), we favor a 15% ownership cap for both Dutch Harbor and western Aleutian Islands regions. We also favor the suboption for (d) which states that “no initial issuance shall exceed the cap specified” and that any amount of QS issued to a person in excess of the cap shall be distributed “equally” to other qualified persons receiving an allocation in the fishery.

We believe that the 15% ownership cap and an equal distribution of excess shares is the best way to resolve the excessive share issue and avoid windfall QS allocations to a few large operators.

5) “1.1 Crab fisheries included in the program...Option (A) Exclude E.AI tanner, W AI tanner, Dutch Harbor Red king crab, and W AI red king crab”

6) “1.4.2.8 Adak Red King Crab...Option: (c) Not appropriate for rationalization”

This fishery does not meet the criteria for rationalization. Rationalization is a tool that primarily addresses concerns of overcapitalization and over fishing.

Respectfully submitted,

Rick Mezich
List of vessels that support the letter and participate in the Aleutian Island Brown crab fishery.

F/V Alaska Sea, Owner-Ozzie Nordheim
F/V Andronica, Owner-Gary Howe
F/V Artic Dawn, Owner-Dale Dier
F/V Aleutian No. 1, Owner-Jostein Karlsen
F/V Ballyhoo, Owner-John Sjong
F/V Early Dawn, Owner-Rick Mezich
F/V Erla N, Owner-Bing Hinkel
F/V Lady Alaska, Owner-Kevin Suydam
F/V Pacific Star, Owner-Hjelle Enterprises by: manager: R & B Fisheries, Inc.
F/V Shishaldin, Owner-John Sjong
F/V Western Viking, Owner-Jim Stone
F/V Sea Venture, Owner-Dan Gunn
F/V Aleutian Spray, Owner-Chris Knutsen

Ozzie Nordheim  
(Verbal-out-of-town)

Dale Dier

Jostein Karlsen

John Sjong

Rick Mezich

Bing Hinkel

Kevin Suydam

Hjelle Enterprises

John Sjong

Jim Stone

Dan Gunn

Chris Knutsen
Agenda Item C-1 – Crab Rationalization
“Additional Provisions”
Item 3.2.2.2 - Calculation and Basis for Initial Allocation of QS
1.4.1 - Additional Sunk Vessel Provision
Comments of Controller Bay Joint Venture
December 4, 2002

Controller Bay Joint Venture requests that the additional sunk vessel provision adopted for analysis by the Council at its October 2002 meeting (the “PL 106-554 Provision”) be included as an additional sunk vessel provision in the crab rationalization preferred alternative. Controller Bay Joint Venture further requests that under the PL 106-554 Provision, QS be allocated to a qualifying person at 100% of the sunk vessel’s average history for the years unaffected by the sinking.

1. Background. The circumstances surrounding the sinking and replacement of the vessel CONTROLLER BAY are unique, and warrant special consideration by the Council. The vessel sunk in May of 1999. Between May of 1999 and December 2000, the vessel’s owner, Controller Bay Joint Venture, dealt with numerous Coast Guard issues related to the sinking, claimed and received the insurance proceeds, contracted a marine architect to draw up plans for a replacement vessel and negotiated a vessel construction contract. The Joint Venture even made a substantial advance deposit with Fred Wahl Marine Construction in September of 1999 to secure its opportunity to have the replacement vessel constructed.

However, just as the Joint Venture was prepared to finally execute the vessel construction contract, it received notice from the NMFS RAM Division that under the original Bering Sea Crab Capacity Reduction Act (PL 106-554), a replacement vessel would not be eligible to operate as a crab vessel in the Bering Sea. The Joint Venture was forced to put its plans to reconstruct the vessel on hold, and spent substantial sums of money pursuing an extension of the IRS vessel replacement deadline, and an amendment to PL 106-554 to restore the replacement vessel’s Bering Sea crab fishery eligibility. IRS granted the extension, and PL 106-554 was successfully amended in the summer of 2001. However, by that time the Joint Venture had lost place in line it had reserved at shipyard, and inflation had substantially increased construction costs. The Joint Venture was not able to renegotiate the contract and modify the vessel plans to meet its budget until December, 2001.

The impact of the vessel replacement hiatus Controller Bay Joint Venture suffered as a result of the PL 106-554 problem was financially devastating. The Joint Venure lost a full year of fishing and tendering income. In addition, the Joint Venture incurred substantial legal and accounting expenses, and increased shipyard costs. Mr. Miller (the Joint Venture’s manager) estimates the lost income, expenses and increased costs to total over $1,000,000.00.

The sunk vessel provision included in the Council’s crab rationalization options and elements in April 2002 would have covered the CONTROLLER BAY. Mr. Miller
(who was working on the replacement vessel himself) mistakenly assumed the provision would be adopted in the same form at the June 2002 Council meeting, and therefore did not attend the meeting. Unfortunately, the sunk vessel provision was substantially modified in the preferred alternative adopted by the Council in June, to the effect of excluding the Joint Venture from receiving any compensation whatsoever.

The Council adopted an additional sunk vessel provision for analysis which addressed the Joint Venture’s circumstances at its October 2002 meeting. However, at that time, the Council did not establish the percentage of the sunk vessel’s annual average catch history during the QS qualifying years that a person qualifying under the provision would receive. Instead, the Council adopted a range of 50% to 100%, requested that the staff analyze the impact of the provision, and indicated its intent to take further action on the provision at this meeting.

2. **Action Requested and Justification.** As stated above, Controller Bay Joint Venture requests that the Council include the additional sunk vessel provision in the preferred alternative, and set the QS allocation rate for the years between the sinking and the replacement of the sunk vessel at 100%.

As a fundamental matter, it would be arbitrary and capricious to include a sunk vessel provision that compensated other similarly situated parties, but excluded Controller Bay Joint Venture. Controller Bay trusts the Council will include the additional provision to treat it fairly and reasonably under these circumstances.

If the Council does so, it also needs to set the QS allocation percentage for the provision. Controller Bay believes 100% is a fair and equitable percentage. First, Controller Bay suffered a unique and significant loss as the result of PL 106-554. That loss has already placed the Joint Venture in difficult financial circumstances. If it were to receive less than 100% of the sunk vessel’s average catch history for the qualifying years between sinking and replacement, the Joint Venture believes that it would not have enough QS to support the replacement vessel’s operations. Given the adverse financial impact the Joint Venture suffered as the result of the sinking and hiatus in its ability to replace the vessel, its ability to acquire such additional QS has been severely impaired.

Second, Controller Bay’s circumstances are sufficiently different from those of the specific case the Council considered when setting the 50% compensation rate in the initial sunk vessel provision to warrant the higher percentage. While we understand that there may as many as a dozen vessel owners that could potentially benefit from the original sunk vessel provision, we note that the Heuker Brothers, Inc. situation involving the replacement of the CHEVAK with the SANDRA FIVE was the lead case considered by the Council in connection with that provision. A copy of the March 31, 2001 letter that Chris Heuker submitted to the Council on this issue is attached. As you can see, the circumstances in that case were quite different from those of the CONTROLLER BAY.

The CHEVAK sank in February of 1994. Its fishing rights were idle for 2 years. Then, in 1996, Heuker Brothers initiated plans for its replacement. Final contracts were
not executed until October, 1997. The net result is that Heuker Brothers, Inc. stands to receive catch history compensation for a period of approximately 2 years during which it had not yet planned to replace the vessel, and for a period of approximately 1 ½ years during which it was in the process of doing so. We respectfully submit that if it is fair and reasonable to compensate Heuker Brothers at a 50% rate for the four year period spent replacing the CHEVAK, which includes 2 years prior to its planning to do so, it is fair and reasonable to compensate Controller Bay Joint Venture at 100% for the 1999 and 2000 qualifying year seasons it missed while it was diligently trying to replace a vessel it had actively employed prior to the time it sank.

In closing, we note that the staff projects only one vessel to qualify under the initial sunk vessel provision. Therefore, its impact on the overall QS allocation should be de minimus, even at 100% of the sunk vessel’s average catch history. Further, we note that the Council’s Advisory Panel voted unanimously to adopt the additional sunk vessel provision, with a 100% allocation rate. We respectfully request that the Council do the same.
March 30, 2001

David Benton, Chairman
and NPFMC Council Members
605 West 4th Ave, Ste 306
Anchorage, AK 99501-2252

SUBJECT: Crab Rationalization - Replacement Vessel/Catch History

We are the owner of the F/V Sandra Five, ADF & G #70770, a replacement vessel for the F/V Chevak, which sank in February 1994. Before being lost, the Chevak was a crab catcher vessel with catch history dating back to the 1980s. The Chevak was strictly a pot fishing catcher vessel, and if not lost, it would still be active in the pot fisheries.

Plans for replacement of the Chevak and purchase of the fishing rights and catch history began in 1996. Final contracts were acquired in October 1997, and construction of F/V Sandra Five began November 4, 1997 with completion on June 20, 1998. The Chevak had catch history from 1990-1994 and F/V Sandra Five has catch history from 1998 (blue and red king crab) and 1999 (opilio, blue and red king crab).

I understand the committee is considering catch history from 1990-1999, 1992-1999 or 1995-1999. Due to the time and financial commitment required, replacement vessels cannot be completed in between seasons. Therefore, under the first option (1990-1999), we would lose 40% of our catch history. For the years 1992-1999, we would lose 60% of our catch history, and for the years 1995-1999, we would lose 80% of our catch history. This is based on the opilio fishery only. A reduction of this magnitude would put undue hardship on our participation in the future crab fisheries, and ultimately affect the financial stability of the families relying on the income from this vessel.

To my understanding, there are 10-12 vessels in the same situation. The vessels could average their catch history over the years they participated and apply the result to the years they lost during replacement of the vessel. It would be unreasonable to apply zero catch histories in coming up with an average for the vessel as the vessel has proven history when the vessel was participating. This would not apply to vessels that left to participate in another fishery, rather only those vessels that did not participate in any fishery at all.

With this said, it would be our recommendation that the Crab Rationalization Committee address the issue of replacement vessels and find ways to resolve it in the planning stages rather than later where there is potential for delaying adoption of the program.

Sincerely,

Chris Heuker
Chairman Benton  
North Pacific Fishery Management Council  
Anchorage, Alaska  

November 22, 2002  

Re: Agenda Item C-1, Crab Rationalization  

Dr Mr. Benton  

The undersigned Adak Red King crab LLP permit holders ask the council to revisit the decision to include Aleutian Islands Red crab in the rationalization program. The recent open access test fishery on the Petrel banks was successfully completed with the highest CPUE’s since the mid 1970’s. It is inequitable to allocate 80% of this rebuilding multi-million dollar fishery to four vessels based on years of little or no crab abundance or effort, when the fishery supported thirty vessels last month, and scores of vessels in the 1970’s and 1980’s.  

At the June meeting, the AP heard much testimony about the Adak fishery and voted without opposition to exclude the fishery from the rationalization plan, determining that it did not meet the standards requiring further rationalization. The analysis itself in the executive summary recommended against inclusion of this fishery in the plan. The analysis shows that 80% of this fishery will be allocated to four vessels. There is no substantial basis for this Council to act contrary to the Magnus Stevens Act and allocate excessive shares in this fishery, when inclusion of this rebuilding fishery was opposed unanimously by the AP, recommended against by the Council’s analysts and virtually all public testimony and written comment.  

There is no management problem and no overcapitalization because only twenty to thirty permanent LLPs will be issued for this fishery. The recent open access season was successfully managed with thirty vessels averaging over $100,000 each in a $3.25 million dollar gross fishery. 100 per cent observer coverage was required so that ADFG could better use the catch data to define future GHLS and vessels were limited to 40 pots. There is no reason why a similar open access plan cannot be used as the GHL is raised in future years.  

The excessive share problem is created because the allocation years had such low abundance that the fishery could not support a directed single pot fishery spanning several months. The GHLS were never reached during the base years and the fishery remained open for months by regulation despite low and uneconomic CPUEs.  

For example, in 1995, the most recent base year, only four vessels participated in this fishery with a total catch of 36,000 pounds over three months. Our vessels did not have a competing fishery because Bristol Bay Red Crab was closed in 1995. We did not fish
Adak because it was not economic and because many believed the fishery should be closed for conservation reasons.

Contrast the recent 2002 fishery when approximately thirty vessels with 100% observer coverage and a 40 pot limit harvested 500,000 pounds in 49 hours with an average CPUE of over 17 crabs per pot. If these CPUE’s are sustained again next year the GHL will likely be doubled to one million pounds. This fishery actually had sustained harvests of over 10 million pounds a year for ten years during the 1970’s. If the fishery had reasonable CPUE’s during the base period or if a longer set of qualifying years had been used the fishery would have been allocated to a broader group of vessels.

The excessive share problem may well be even worse and more concentrated than the analysis can discuss because of confidentiality requirements when four or less vessels are involved. While the analysis did show that the top four vessels would be given 80% of the fishery, the analysts stated that the Council did not have the information necessary to know or understand “the actual distribution of allocations.” We believe the Council acted in the dark in regard to the true allocative impact of this decision and request a reconsideration.

In brief:

1. The AP heard much testimony and voted without opposition against inclusion.
2. The executive summary of the analysis recommended against inclusion.
3. The ACC recommended against inclusion at June 2002 Council meeting.
4. Virtually all public comment has recommended against inclusion.
5. The analysis shows excessive shares are being issued. (80% to four vessels)
6. Confidentiality requirements prevented the analysis from showing the true allocative impact of this decision.
7. The Council’s decision was clouded by confidential data.
8. No management problems or excessive capitalization problems exist
9. The recent test fishery had the highest CPUE since the late 1970’s
10. The recent test fishery grossed @3.25 million dollars for 30 vessels, averaging over $100,000 per vessel
11. The fishery is being allocated improperly because the council used only four years of history (all other fisheries are five or six) and these base years did not have sufficient resources to support a meaningful directed fishery, while the fishery historically supported scores of vessels during years of higher abundance.
Respectfully

Rick Mezich
Early Dawn

Dan Gunn
Sea Venture

Kevin Kaldestad
Kevin Kaldestad
Aleutian Mariner
Nordic Mariner

Tim Kennedy
Nowitna
Mystery Bay

Bill LeBow
Lady Ann

Leonard Herzog
Anna Maria

Doug Wells
Baranof
Chairman David Benton  
North Pacific Fishery Management Council  
605 West 4th Avenue, Suite 306  
Anchorage, AK 99501-2252

RE: Agenda Item C-1, Crab Rationalization and other management issues

Dear Chairman Benton,

This letter is for the purpose of explaining problems we have with the NPFMC’s June motion regarding Crab Rationalization, and how it might be remedied. We appreciate your consideration and review.

**Background:** Michael and Patrick Burns (dba “Blue North Fisheries”) have participated in the crab fisheries of the Bering Sea for 15 years.

- With the passage of the American Fisheries Act (AFA) in October 1998, and the resultant closed class of “AFA-processors” allowed to process pollock, came restrictions to limit the amount of crab these favored entities could process (“sideboards”).
- In specific reliance on the AFA sideboards, and concerned about this restricted processing marketplace, Blue North Fisheries invested considerably in excess of $1 million in acquiring a processing vessel (the “Blue Dutch”) to process crab caught by its commonly owned crab harvesters.
- Starting in October 1999 and continuing into the present, Blue Dutch has processed in every season, an aggregate in excess of 500,000 pounds of raw, delivered crab, all of which was caught by Blue North Fisheries vessels in the Bristol Bay red king crab and Bering Sea C. opilio (snow crab) fishery.

**Crab Rationalization Processing Quota Shares:** In June 2002, the North Pacific Fishery Management Council recommended to establish processing quota shares for the first time in any U.S. fishery.

- Given the extent of its crab processing in 1999-2002, Blue Dutch reasonably expected to receive processing quota shares equivalent to its present effort.
- However, the Council omitted the most recent three years of processing effort and picked the years 1997-1999 (years most advantageous to AFA crab processors) for the Bristol Bay red king crab and Bering Sea C. opilio fisheries. By contrast, the AFA used for historical participation the three years preceding the year of enactment.
- The result is that Blue Dutch is extremely underprivileged despite its active current processing, and processors with less recent participation that have exited the fishery will receive more processing quota shares.
Analysis Incomplete: The June Council motion fails to adequately consider consistency with other applicable laws and prior legislation.

- Despite over 600 pages of analysis in the Crab Rationalization Alternatives – Public Review Draft, only two pages address effects of repealing the previous legislation of AFA sideboards. No mention of investment reliant on these sideboards is made. By contrast, Council staff’s EA/RIR/IRFA for AFA Sideboard Measures dated January 7, 2000 dedicates over 75 pages of analysis to cover minor revisions, including specific mention of investment in reliance on AFA sideboard provisions.
- Magnuson Stevens Act provisions applicable to establishment of limited access systems are omitted from the analysis. Specifically, Section 303(b)(6)(A) requiring account of “present participation in the fishery” and Sec. 303(b)(6)(B) requiring account of “historical fishing practices in, and dependence on, the fishery” both are ignored.
- No control date was set announcing when processing activity no longer applied to potential future limited access programs, not giving fair notice to new entrants in the processing sector. This conflict as well is missing from the Council staff’s analysis.

Solution: The Council should amend the June Council motion for Crab Rationalization to provide Blue Dutch with processing quota shares commensurate with its present processing participation.

- Specifically, Blue North Fisheries processing shares should allow its processing vessel to process the catch of its commonly owned catcher vessels.
- The amount provided to Blue Dutch under such amendment would be minimal, less than 1.5% of the total amount of the crab processing quota shares.
- Reasonable accommodation is narrowly defined by these three elements - (1) investment subsequent to passage of AFA, in reliance on sideboard provisions, (2) common ownership of crab harvesting vessels, and (3) consistent, recent processing participation.
- Response to anticipated opposition is provided.

Respectfully, we ask the Chairman and members of the North Pacific Fishery Management Council to consider this petition for inclusion of Blue Dutch in initial allocation of processing quota shares. Draft language supporting this motion is attached. Thank you for your consideration.

Regards,

Capt. James Mize
Government Affairs
Blue North Fisheries
Draft motion to the June, 2002 NPFMC Crab Rationalization motion:

Amend the motion to include the following language in Section 2.3:

2.3.1 Allocation to acknowledge present participation —

(a) A crab processor whose crab processing vessel is commonly owned with crab catcher vessels shall be allocated crab processing quota shares, in each Bering Sea and Aleutian Island crab fishery, that in the aggregate equal the amount of crab catcher vessel quota shares allocated for those catcher vessels for each such fishery, if—

(1) the common owners of those vessels—

(A) invested in excess of $1 million in that crab processing vessel and related equipment after the date of enactment of the American Fisheries Act (title II of Public Law 105-277, approved October 21, 1998); and

(B) participated with that processing vessel in the Bering Sea and Aleutian Islands crab fisheries during at least three of the four calendar years following that date of enactment, as evidenced by the State of Alaska Commercial Operators Annual Report; and

(2) that processing vessel processed a total of at least 500,000 pounds of raw, delivered crab caught during those calendar years by those commonly owned catcher vessels.

(b) In the event that the processing vessel identified in 2.3.1(a) was engaged in catcher-processor activity during years selected for processing history, such allocation shall not exceed the aggregate maximum capacity of the commonly owned catcher vessels for each such fishery.

Notes:

- Section 2.3.1(a)(1) outlines threshold processing participation levels subsequent to passage of the AFA and corresponding sideboards.

- Section 2.3.1(a)(2) specifies minimum aggregate processing levels to establish actual processing (as opposed to speculative registration) in order to prevent abuse of this provision.

- Section 2.3.1(b) responds to challenges that in fisheries with high quotas during the historical participation period for processing, processing activity for catcher-processors would be constrained to the last load retained aboard the catcher vessels, processed subsequent to the close of the season.

- Some concern has been expressed that this language may provide "loopholes" for permit speculators with no present processing participation. Alternatives suggested include simply naming Blue Dutch as the only qualifying entity for this provision.
BSAI Crab Rationalization: 
Cumulative Impacts on the Northern Region

Concessions the Northern Region made during the NPFMC Crab Rationalization Committee process:

1. IFQ “B” shares are not regionalized.
2. Bairdi is not regionalized as a by-catch fishery.
3. Catcher/processors may utilize shore-based IPQ inside three miles.
4. Only 25% of the CDQ allocation must come ashore.

Additional concessions the Northern Region is now asked to accept by various parties (could be allowed within current motion):

1. Exempt Adak Red Crab from Regionalization.
2. Exempt Skipper shares from Regionalization.
3. Cap PQS at levels as low as 135 million pounds.
4. Selectively implement the Cooling Off period by exempting several species/QS classes.
5. Accept very low CDQ ownership caps.
6. Not in the motion but proposed in the process: Kodiak Free Port, PQS caps as low as 35 million pounds, floater exemptions during Cooling Off period, additional species exemptions and rule rewrites, etc.

First steps the NPFMC can take to restore Northern Region protections:

1. Establish CDQ ownership caps for IFQ at 5%.
2. Establish 2 year Cooling Off period now to give Community Committee a specific framework to get its discussions moving and avoid foot-dragging.
3. Take immediate action to grant non-CDQ (Southern Region) communities PQ purchase rights and establish “even playing field” for Community Committee work.
4. Apply the same delivery restrictions on Skipper shares and allow liberal trading to resolve matching problems.
BSAI Crab Rationalization:
Cumulative Impacts on the Northern Region

After an exhaustive three year process, the NPFMC has voted unanimously to adopt a “Three-Pie Voluntary Cooperative” model for BSAI Crab Rationalization that is truly groundbreaking in its response to the needs of harvesters, processors, crab communities and long-time skippers. The City of Saint Paul and the Central Bering Sea Fishermen’s Association (a western Alaska CDQ organization) fully endorse the proposed framework.

However, several issues are still in the hands of a variety of “trailing amendment” committees, and the cumulative impacts of that committee work could potentially strip away the northern region protections which the Council and its Crab Rationalization committee have worked so hard to develop.

Early in the process Saint Paul was asked – and agreed – to make a number of concessions to allow for the development of competitive markets and the growth of primarily southern region ports. We feel that the northern region has already made these concessions:

1. Allowing the IFQ “B” shares to be developed as pure IFQ rights without regional landings requirements. This amounts to a virtual 10% “gift” to southern region ports, and Kodiak in particular.

2. Allowing Bairdi – a northern region species – to be exempt from regionalization. This was the single largest concession made by the northern region for the southern region, and combined with the “B” share issue it was considered enough to “do the deal” and specified in the NPFMC’s Crab Rationalization Committee “Majority Report”.

3. Allowing catcher/processors to operate as near-shore floaters and acquire/lease or process PQS – a concession which will further reduce the economic benefits that will “come ashore” to crab-dependent communities.

4. The decision to allow up to 75% of the CDQ crab go to catcher/processors (until now virtually 100% of the CDQW crab has been landed in northern region communities).

Now, there seems to be an active push by some sectors and southern region communities to gain additional concessions prior to final adoption; and almost all of the concessions will be extracted from the northern region communities. In particular, we are concerned about the individual and cumulative impact of the following proposed Council alternatives:

1. The lack of a regional landing requirement for Adak red crab. This new proposal makes sense in and of itself, but when combined with the Bairdi concession, the continued decline in opilio harvest levels, and the long-term closure of the Pribilof
and St Maththews fisheries, it leaves the Pribilof Islands with almost no tangible landings protection.

2. The proposal to create a unique class of Skipper shares without any regional designation. This is particularly troublesome to St. Paul. Adoption of the committee proposal will expand the class of pure-IFQ rights and further diminish northern region landings.

The City of Saint Paul has commented on this issue before, and we would like to summarize our understanding here:

Section 3.2.5 (2) of the Council states that "...if the cumulative harvester quota associated with each region differs from the total regional share, by species, the harvester share, by species, shall be adjusted, up or down ..."

It is clear that the Council has established a regional landing requirement, and that "cumulative harvester quota" must be allocated (and adjusted) consistent with regionalization. Therefore, any plan to exempt or redefine Captain’s quota as something other than a subset of harvester quota is inconsistent with the Council’s intent.

To quantify the Council’s intent as it applies to the regionalization of harvester shares, one needs to again start with 3.2.5 (1) and the Council requirement that "...the base year for determining processing shares and the base period for determining the share assigned to each region shall be the same." Keeping in mind that cumulative harvesting shares must be adjusted to be consistent with this provision (and not the other way around) as specified in 3.2.5 (2), one then needs to reference 2.4.1, Option 3, which clearly states that "90% of GHL (or TAC) would be issued as IPQs – the remaining 10% would be considered open delivery."

3. The proposal to cap CDQ ownership levels is problematic for the northern region. QS ownership may be the best and final form of community protection if in fact the Council chooses to dilute northern region protections by adopting several of the alternatives described above.

4. The proposal to cap PQS at various levels as low as 35 million pounds – a proposal designed solely to allow crab landings to shift away from northern region ports and towards southern region ports.

5. The various proposals to only partially implement the “cooling off” period by excluding “B” shares, Skipper shares, bairdi, CDQ shares and Adak Red King Crab shares.
The duration of the Cool Down Period shall be one year from the implementation of the crab rationalization program. During this one year period, the following elements will apply:

a. The method to determine the shares associated with a community will be the same method used for allocating processing quota, as set out in the June, 2002, motion: The processor qualifying years (97-99 in most cases) aggregate pounds processed in the community, times the percentage of the TAC for which IPQ is issued, divided by the total catch for the three year period, also times the percentage of the TAC for which IPQ is issued.

Comment: This method would ensure that the sum of the community designations would equal the regional designations, since they use the same system of determination. If Adak red crab and Bairdi are not exempted from the cool down period, then the rules for determining the community must be established. We would suggest that it should be based on the system of qualification for each of those fisheries. For example, in the case of Bairdi, the community designations would be based upon where 50% of the Bristol Bay red king crab and 50% of the opilio was processed (since that is the basis for allocating Bairdi processing quota).

b. “Community” shall be defined as the boundaries of the Borough or, if no Borough exists, the city, as defined for tax purposes. To be an eligible city, it must be a second class or first class city, and must have at least 1% of the PQ issued in any fishery to require continued use of the PQ in the Community during the cool down period.

Comment: There should be no requirement to process in the community unless the community is one recognized by the State of Alaska. Processing that historically occurred outside a community should be allowed to continue that pattern during the cool down period (although still subject to the regional designations required under the June Council motion).

c. 16% of the processing quota may leave a community on annual basis, or up to 500,000 pounds, whichever is greater. This would be implemented on a pro rata basis to all processing quota holders in a community.

Comment: There should be a portion of the processing quota that can leave the community (on a year by year basis if the cool down period is more than one year) to accommodate the difficulties of getting fishers to deliver to a specific community. This should be implemented on a per quota holder basis. This is to ensure there is not a “rush” to fill the portion that is allowed to move and it would also likely minimize the amount that is moved. In cases of very small TACs, the percentage basis does not allow sufficient flexibility, and in those cases we would suggest allowing up to 500,000 pounds leave a community, again distributed on a pro-rata basis among the processing quota holders in the community.

d. Exempt the Bairdi, Adak red crab and Western Aleutian Islands brown crab fishery from the cool down provision.
Comment: Some fisheries are so small that they should be exempted from the cool down period. The Council motion recognized this by providing that option for the Bairdi and Adak red crab fishery. The motion also exempted the Western Aleutian Islands brown crab fishery because of the requirement that 50% of the “A share” crab from that fishery be processed in the Western region (when a much smaller percentage had been processed there during the qualifying years). It would be inconsistent to have the cool down period (and processing required in the community where the processing quota was earned) and the requirement that 50% of the A share crab be processed in the Western Region.

e. There should be an exemption from the requirement to process in the community if an act of God prevents that from occurring.

Comment: Relief from the processing requirement is needed if an act of God, such as a plant fire or other calamity prevents processing in the community. A timely system to authorize the waiver needs to be in place. This waiver would be of the cool down requirements only, not of the underlying regional designations.

f. Allow the trading of IPQ among holders of IPQ so long as there is no net loss to a community.

Comment: there is no reason to prevent trading of IPQ to accommodate delivery and processing needs so long as the net result is the same for the community.

If the cool down provision lasts more than one year, we would additionally request the following provision:

g. During the cool down period, there be established a timely process under which the restrictions on processing be waived if there is an increase in community imposed taxes, fees or costs of services over what they have been historically. This should include taxes, port charges, utility charges and other charges under the direct or indirect control of the community where the processing occurs.

Comment: This is intended only to prevent undue higher costs of processing during the cool down period. This provision would not apply to services outside the control of the community. Although the Council does not and cannot control the costs of services in a community, it can control the restrictions placed on where crab must be processed.
ANALYSIS OF ECONOMIC IMPACTS FROM FISHING RESTRICTIONS ON THE KODIAK ISLAND BOROUGH ECONOMY

PREPARED FOR:
KODIAK ISLAND BOROUGH

McDowell GROUP
Research-Based Consulting
Juneau
Anchorage

NOVEMBER 2002
ANALYSIS OF ECONOMIC IMPACTS FROM FISHING RESTRICTIONS ON THE KODIAK ISLAND BOROUGH ECONOMY

PREPARED FOR:

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PREPARED BY:

McDowell GROUP

NOVEMBER 2002
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EXECUTIVE SUMMARY

Introduction

The Gulf of Alaska and the Bering Sea/Aleutian Islands groundfish fishery is one of the largest volume and highest revenue producing fisheries in the world. With its strategic location and strong fishing tradition, Kodiak is a major center for the processing of groundfish. Kodiak consistently ranks among America’s top three seafood ports in ex-vessel value.

In 2001, the McDowell Group completed an assessment of potential impacts on the Kodiak economy from management alternatives proposed by the National Marine Fisheries Service. An economic model was developed for the Kodiak economy based on published employment data, as well as on McDowell Group estimates of the annual average employment and take-home pay of Kodiak-based skippers and crew.

Currently, the National Marine Fisheries Service is continuing the Supplemental Environmental Impact Statement (SEIS) process to assess effects of management alternatives for groundfish in the North Pacific. Kodiak’s economy is facing other challenges as well, including low salmon prices and crab fishery rationalization.

This document is an update of the 2001 report and model, and reflects changes in Kodiak’s economy due to recent fishery abundance, market conditions, and management regimes. The effects of these changes on Kodiak are summarized below.

Seafood Industry Trends

Commercial Fishing Sector

- The Gulf of Alaska (east of Yakutat) pollock and cod quota fell by over 40 percent between 1999 and 2002.

- Approximately 30 thousand metric tons of the available quota were not harvested in 2000 and 2001 due to the closure of areas traditionally fished by the Kodiak fleet, for Stellar seaion protection.

- The total salmon harvest in the Kodiak area, measured in pounds, increased by 20 percent while value declined by 66 percent between 1999 and 2002.

- Ex-vessel value in Pacific Halibut Regulatory Areas 3A and 3B, where most Kodiak vessels fish, has ranged from $74 million to $81 million. The 2001 harvest was valued at $74 million, down about 9 percent from the 2000 value.

- Crab ex-vessel value in the Bering Sea opilio and Bristol Bay king crab fisheries, the most important crab fisheries to the Kodiak fleet, declined by 64 percent between 1999 and 2002. Fishermen saw the value of their crab harvest decline by $167 million.
Seafood Processing Sector


- Pollock production fell from 166 million pounds to 91 million pounds, between 1998 and 2001, a 45 percent drop. Cod production peaked in 1999 at 85 million pounds, then declined to 55 million in 2001, down 35 percent.

- Salmon landings in Kodiak increased in 2001 to 79 million pounds; however, salmon values dropped to $19 million (a 40 percent drop from the 1999 level of $31 million).

- Halibut poundage landed at Kodiak declined by 14 percent between 1999 and 2001 as increasing numbers of fishermen landed their fish at Homer or Seward, where prices are higher.

- Crab value landed in Kodiak increased from $2.8 million in 1999 to $4.9 million in 2002.

- The ex-vessel value of all seafood processed in Kodiak dropped to a three-year low in 2001 to $81 million, down from $104 million in 1999. Cod values dropped by 38 percent, from about $25 million to $16 million.

Trends in Kodiak’s Economy

In the McDowell Group’s July 2001 report, it was estimated that a 30 percent decline of groundfish volume available to Kodiak processors would result in the closure of one processing plant, the loss of 500 processing jobs, and 200 support sector jobs. The study team also predicted that a portion of the current resident Kodiak processing labor force would move because they could not afford to live in Kodiak year-round due to reduced employment opportunities. These estimates now appear reasonable, and perhaps some were conservative, in light of recent trends in Kodiak.

- Kodiak commercial fishermen’s net income in 2001 of approximately $49 million was 20 percent below the 1999 level of $63 million. Total income for 2002 is likely to be still lower.

- Processing sector payroll dropped by $9 million between 1999 and 2001. The loss of another $8 to $10 million in processing payroll is expected for 2002.

- It is expected that total seafood industry payroll in Kodiak (including commercial fishing net income and processing payroll) in 2002 will be $25 to $30 million below the 1999 level.

- Total seafood industry employment in Kodiak in 2001 averaged approximately 2,700 jobs (including commercial fishing and seafood processing). The 2002 average is expected to drop to about 2,300 jobs, nearly 20 percent below the 1999 average of 2,800 jobs. Almost all of this decline has been in the processing sector.

- A total of four processors closed in 2001 and 2002, including Cook Inlet Processing (doing business as Polar Equipment), Global Seafoods, Kodiak Salmon Packers and Kodiak Seafood Processing.

- These companies accounted for an annual average of almost 300 jobs – about one quarter of shore-based processing employment. Two of the four plants that
closed – Global Seafoods and Cook Inlet Processing – were largely dependent on groundfish and had a combined annual average employment of 265.

- Preliminary 2002 estimates of annual average employment with shore-based processors indicate a decline of almost 500 jobs from the 2000 peak. Shore-based processing employment dropped from 1,458 in 2000 to an estimated 985 in 2002. That represents a drop of about one-third. Most of this decline occurred between 2001 and 2002 (400 of the 500 jobs).

- Even before the dramatic decline in processing employment in 2002, Kodiak’s economy was showing signs of weakness. Based on McDowell Group estimates, total borough-wide payroll declined by 8 percent between 1999 and 2001, from $265 million to $243 million (this includes estimated net income for fishermen). Annual average employment declined by 150 jobs.

- Kodiak’s service sector has been affected by the decline in seafood industry activity and income. For example, retail employment in Kodiak dropped by 70 jobs between 1999 and 2001.

- There are other indicators of a weakening Kodiak economy. For example, the average private sector wage in Kodiak declined 7 percent between 1999 and 2001.

- Though it is too early to measure all the impacts on Kodiak’s economy stemming from the decline in the local seafood industry, long-term structural changes are likely. For example, the loss of groundfish volume has led to increasingly seasonal employment and fewer hours of work available. This has and will continue to cause residents to leave the island to seek more stable employment.

- Structural changes in Kodiak’s economy, stemming from reduced groundfish harvesting and processing (as well as changes in other fisheries) include a broad range of socioeconomic implications. These include potential decline in school enrollment, loss of tax revenues that support local government services, reduced local investment in housing and businesses, and others.

- The shift to more seasonal labor demand will increase costs to processors, who must recruit, house, feed, transport and train their labor force. This could result in additional plant closures.

- Over the next several years, additional employment and income losses in Kodiak’s support sector are expected, as households and businesses adjust to the decline in commercial fishing and processing.

- Additional economic losses associated with fisheries management actions would further hamstring an economy that is already in recession.

A summary of these and other trends is provided in the following table.
## Table 1. Recent Trends in the Kodiak's Fisheries and Economy

<table>
<thead>
<tr>
<th>Harvesting Sector 1 (Total Catch and Value of Selected Fisheries Important to the Kodiak Fleet)</th>
<th>1999</th>
<th>2002</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pollock/cod ex-vessel catch (millions of pounds)</td>
<td>160</td>
<td>84</td>
<td>-48%</td>
</tr>
<tr>
<td>Halibut ex-vessel value (millions of dollars)</td>
<td>$75</td>
<td>$80</td>
<td>+6%</td>
</tr>
<tr>
<td>Salmon ex-vessel value (millions of dollars)</td>
<td>$35</td>
<td>$12</td>
<td>-66%</td>
</tr>
<tr>
<td>Opilio/king crab ex-vessel value (millions of dollars)</td>
<td>$261</td>
<td>$94</td>
<td>-64%</td>
</tr>
<tr>
<td>Trawl permits fished</td>
<td>40</td>
<td>35(^2)</td>
<td>-12%</td>
</tr>
<tr>
<td>Salmon permits fished</td>
<td>397</td>
<td>242</td>
<td>-39%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kodiak Processing Sector</th>
<th>1999</th>
<th>2001</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groundfish ex-vessel volume purchased (millions of pounds)</td>
<td>238</td>
<td>176</td>
<td>-35%</td>
</tr>
<tr>
<td>Groundfish ex-vessel value (millions of dollars)</td>
<td>$41</td>
<td>$33</td>
<td>-15%</td>
</tr>
<tr>
<td>Halibut ex-vessel volume purchased (millions of pounds)</td>
<td>9.9</td>
<td>8.5</td>
<td>-14%</td>
</tr>
<tr>
<td>Halibut ex-vessel value (millions of dollars)</td>
<td>$21</td>
<td>$16</td>
<td>-24%</td>
</tr>
<tr>
<td>Salmon ex-vessel volume purchased (millions of pounds)</td>
<td>71</td>
<td>79</td>
<td>+11%</td>
</tr>
<tr>
<td>Salmon ex-vessel value (millions of dollars)</td>
<td>$31</td>
<td>$19</td>
<td>-40%</td>
</tr>
<tr>
<td>Crab ex-vessel volume purchased (millions of pounds)</td>
<td>1.4</td>
<td>1.4</td>
<td>0%</td>
</tr>
<tr>
<td>Crab ex-vessel value (millions of dollars)</td>
<td>$2.8</td>
<td>$4.9</td>
<td>+75%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kodiak Economy</th>
<th>1999</th>
<th>2001</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shore-based processing employment</td>
<td>1,314</td>
<td>985(^3)</td>
<td>-25%</td>
</tr>
<tr>
<td>Non-government support sector employment</td>
<td>2,430</td>
<td>2,400</td>
<td>-1%</td>
</tr>
<tr>
<td>Seafood harvesting payroll (millions of dollars)</td>
<td>$63</td>
<td>$49</td>
<td>-22%</td>
</tr>
<tr>
<td>Total (All Industries) payroll in Kodiak Island Borough (millions of dollars)</td>
<td>$265</td>
<td>$243</td>
<td>-8%</td>
</tr>
</tbody>
</table>

1. Data represents total catch and value in each fishery, including Kodiak and non-Kodiak resident harvests.
2. Trawl permits fished is for year 2001 and is based on preliminary data.
3. Represents 2002 processing employment estimate.
Kodiak Economic Model Output

To describe the Kodiak economy, an export-base model is used (Table 2). The model reflects economic conditions as of 2001, though commercial fishing employment is based on 2000 data. The model shows the relationship between the basic and support sectors of the economy, and provides a baseline against which to gauge the broader impacts of changes in Kodiak fisheries upon the area’s economy. Basic industry exports goods and services to markets outside the local area and brings in new money in exchange. Support industry serves the local population and business community, as residents trade existing dollars with their neighbors. Alaska Department of Labor (ADOL) published seafood processing employment data was inaccurate in 2001 due to over-counting of local employment and payroll with Trident Seafoods, according to ADOL. Therefore, employment estimates from 2000 were used from this employer. Discussions with Trident officials indicate that employment in 2000 and 2001 were similar.

Kodiak’s “Economic Engines” — The Basic Economy

Kodiak’s economic base industries include commercial fishing, seafood processing, and tourism, as well as agencies that manage base industries, such as the Alaska Department of Fish and Game and the National Marine Fisheries Service. The US Coast Guard is also a base industry. The remainder of the local economy consists of support industries that service the local population and business community.

Kodiak’s basic industries account for an annual average of about 4,250 jobs and a payroll of $146 million (Table 2 and Figure 1). This makes up 55 percent of Kodiak’s total employment and 60 percent of total payroll. In terms of employment, the most important basic industries in Kodiak are the seafood industry, the Coast Guard, tourism, heavy construction, and lumber and wood products.

The seafood industry is the largest industry in Kodiak. Annual average employment for Kodiak commercial fishermen was an estimated 946 jobs in 2000, about the same as 1999. Estimated employment in the processing industry declined by almost 500 jobs from 2000 to 2002. Three processors – Global Seafoods, Alaska Salmon Packers and Cook Inlet Processing - closed in the last year.

Basic industry government employment was about the same in 2001 as in 1999 at about 140 jobs. Altogether, the seafood industry accounted for over 2,700 jobs, contributing approximately 64 percent of Kodiak’s economic base employment, 35 percent of total employment and 39 percent of total payroll. A similar share (over 60 percent) of Kodiak’s support industries (trade, services, etc.) are attributed to the dominant seafood industry.
<table>
<thead>
<tr>
<th>Sector</th>
<th>Annual Ave. Employment</th>
<th>% of Total Employment</th>
<th>Total Payroll ($Millions)</th>
<th>% of Total Payroll</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BASIC INDUSTRY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seafood</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seafood Harvesting</td>
<td>946</td>
<td>12%</td>
<td>$49.0</td>
<td>20%</td>
</tr>
<tr>
<td>Processing</td>
<td>1,622</td>
<td>21%</td>
<td>$39.5</td>
<td>16%</td>
</tr>
<tr>
<td>Alaska Dept. of Fish and Game</td>
<td>78</td>
<td>1%</td>
<td>$3.1</td>
<td>1%</td>
</tr>
<tr>
<td>National Marine Fisheries Service</td>
<td>29</td>
<td>&lt;1%</td>
<td>$1.4</td>
<td>1%</td>
</tr>
<tr>
<td>Kodiak National Wildlife Refuge</td>
<td>17</td>
<td>&lt;1%</td>
<td>$0.8</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Fishery Industrial Technology Center</td>
<td>20</td>
<td>&lt;1%</td>
<td>$0.8</td>
<td>&lt;1%</td>
</tr>
<tr>
<td><strong>Total Seafood</strong></td>
<td>2,712</td>
<td>35%</td>
<td>$95.0</td>
<td>39%</td>
</tr>
<tr>
<td>Alaska Aerospace Devt. Corp.</td>
<td>6</td>
<td>&lt;1%</td>
<td>$0.2</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Tourism</td>
<td>242</td>
<td>3%</td>
<td>$4.2</td>
<td>2%</td>
</tr>
<tr>
<td>National Interest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coast Guard</td>
<td>1,100</td>
<td>14%</td>
<td>$35.5</td>
<td>15%</td>
</tr>
<tr>
<td>Agriculture, Forestry and Manufacturing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural services</td>
<td>18</td>
<td>&lt;1%</td>
<td>$0.2</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Forestry</td>
<td>4</td>
<td>&lt;1%</td>
<td>$0.2</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Fishing, hunting &amp; trapping</td>
<td>40</td>
<td>&lt;1%</td>
<td>$2.9</td>
<td>1%</td>
</tr>
<tr>
<td>Lumber &amp; wood products</td>
<td>43</td>
<td>1%</td>
<td>$1.7</td>
<td>1%</td>
</tr>
<tr>
<td>Apparel &amp; other textile products</td>
<td>8</td>
<td>&lt;1%</td>
<td>$0.1</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Heavy Construction</td>
<td>82</td>
<td>1%</td>
<td>$5.5</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total Basic Industry</strong></td>
<td>4,255</td>
<td>55%</td>
<td>$145.0</td>
<td>60%</td>
</tr>
<tr>
<td><strong>SUPPORT INDUSTRY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Construction</td>
<td>85</td>
<td>1%</td>
<td>$2.9</td>
<td>1%</td>
</tr>
<tr>
<td>Transportation, Comm., Util. (TCU)</td>
<td>228</td>
<td>3%</td>
<td>$7.6</td>
<td>3%</td>
</tr>
<tr>
<td>Wholesale and Retail Trade</td>
<td>818</td>
<td>10%</td>
<td>$15.9</td>
<td>7%</td>
</tr>
<tr>
<td>Finance, Ins. and Real Estate (FIRE)</td>
<td>169</td>
<td>2%</td>
<td>$5.8</td>
<td>2%</td>
</tr>
<tr>
<td>Manufacturing-printing</td>
<td>25</td>
<td>&lt;1%</td>
<td>$0.2</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Services</td>
<td>1,076</td>
<td>14%</td>
<td>$28.8</td>
<td>12%</td>
</tr>
<tr>
<td>Federal Government</td>
<td>162</td>
<td>2%</td>
<td>$8.0</td>
<td>3%</td>
</tr>
<tr>
<td>State Government</td>
<td>136</td>
<td>2%</td>
<td>$5.4</td>
<td>2%</td>
</tr>
<tr>
<td>Local Government</td>
<td>781</td>
<td>10%</td>
<td>$22.4</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Total Support Industry</strong></td>
<td>3,480</td>
<td>45%</td>
<td>$96.9</td>
<td>40%</td>
</tr>
<tr>
<td><strong>TOTAL ALL INDUSTRIES</strong></td>
<td>7,735</td>
<td>100%</td>
<td>$242.0</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Compiled by McDowell Group, Inc., based on Alaska Department of Labor & Workforce Development data except where noted.

1 Data for federal and state government, including Kodiak National Wildlife Refuge, National Marine Fisheries Service, and Alaska Department of Fish and Game, are for 2000.
2 Seafood harvesting employment and income are McDowell Group, Inc. estimates, based on CFEC permit data and are for 2000.
3 Processing employment from Department of Labor includes both catcher-processor vessels based in Kodiak and shore based processing employment and payroll figures from the published ADOL data were adjusted down to account for inaccuracies in Trident Seafoods employment figures.
4 McDowell Group, Inc. estimates.
5 Information from Kodiak Island Borough Website.
7 State government employment, less ADFG, FITC, and AADC positions.
The Coast Guard is Kodiak's second largest basic industry, accounting for about 26 percent of the basic economy employment. Tourism, timber industry, hatcheries, heavy construction and manufacturing make up the balance of Kodiak's basic industry.

Figure 1
Kodiak's Basic Industry Composition, 2001
(Percent of annual average basic industry employment)

Source: McDowell Group and Alaska Department of Labor
Seafood Management employment includes Alaska Dept. of Fish and Game, National Marine Fisheries Service, Kodiak National Wildlife Refuge, Fisheries Industrial Technology Center, and the Kodiak Fisheries Research Center Campus. Alaska Aerospace jobs are not depicted in this chart, as they account for less than 1 percent of basic employment.
Kodiak's Support Industries

Support businesses do not create new wealth for the community. However, money brought to the economy by basic industries, such as fishing income, impacts the local economy in many ways as it cycles through support businesses. Local support businesses are important in that they keep money in the local economy.

Kodiak support industries account for an annual average of almost 3,500 jobs and $97 million in payroll (Table 2 and Figure 2). Support industries provide 45 percent of total employment and 40 percent of total earnings. Support industries linked directly to fisheries include a wide array of businesses, including boat yards, fuel sales, engine mechanics, electricians, freight forwarding, hydraulic service, air taxi, accounting, banking and shipwrights. An estimated 60 percent of Kodiak's support industries are the result of the seafood industry.

In order of employment, the most important support industries in Kodiak are services; government; trade; transportation, communication and utilities (TCU); finance, insurance and real estate (FIRE); construction; and support manufacturing such as printing.

Figure 2
Kodiak's Support Industry Composition, 2001
(Percent of annual average support industry employment)

- Local Government (22%)
- Trade (24%)
- FIRE (5%)
- Federal Government (5%)
- State Government (4%)
- TCU (7%)
- Construction (2%)
- Services (31%)

Source: McDowell Group and Alaska Department of Labor
FIRE: Finance, Insurance, and Real Estate
TCU: Transportation, Communications, Utilities
Manufacturing jobs are not depicted in this chart, as they account for less than 1 percent of basic employment.
Seafood Harvesting

Recent Trends in Fisheries Important to Kodiak

The most important fisheries in terms of ex-vessel value to the Kodiak fleet in recent years are groundfish, halibut, salmon and crab.

Most of the Kodiak groundfish fleet fish for cod and pollock in the Gulf of Alaska (excluding West Yakutat and Southeast areas). In 2000 and 2001, about 30 thousand metric tons of fish of the available quota were not harvested due primarily to Stellar sea lion conservation programs, which closed areas traditionally fished by the Kodiak fleet. The estimated 2002 harvest was about 5,000 tons shy of the quota as of November 2002 (Table 3).

<table>
<thead>
<tr>
<th>Year</th>
<th>Catch</th>
<th>Quota</th>
<th>Under Quota</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>160</td>
<td>160</td>
<td>0%</td>
</tr>
<tr>
<td>2000</td>
<td>102</td>
<td>109</td>
<td>-7%</td>
</tr>
<tr>
<td>2001</td>
<td>79</td>
<td>102</td>
<td>-23%</td>
</tr>
<tr>
<td>2002</td>
<td>90</td>
<td>95</td>
<td>-6%</td>
</tr>
</tbody>
</table>


Halibut is the second most valuable fishery to the Kodiak fleet, and one of the most consistent in recent years. Halibut prices have generally exceeded $2 per pound since 1999. Most Kodiak vessels fish in Pacific Halibut Regulatory Areas 3A and 3B, where the estimated ex-vessel value averaged about $78 million from 1999 to 2002 (Table 4).

<table>
<thead>
<tr>
<th>Year</th>
<th>Catch</th>
<th>Estimated Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>38</td>
<td>$75</td>
</tr>
<tr>
<td>2000</td>
<td>33</td>
<td>81</td>
</tr>
<tr>
<td>2001</td>
<td>37</td>
<td>74</td>
</tr>
<tr>
<td>2002*</td>
<td>40</td>
<td>80</td>
</tr>
</tbody>
</table>

Source: National Marine Fisheries Service and Alaska Department of Fish and Game. * 2002 catch represents the annual quota.
The Kodiak salmon fishery represents the third most valuable fishery to the Kodiak fleet. From 1999 to 2002, the commercial salmon harvest ranged from 62 to 94 million pounds. The salmon fishery value, however, plummeted to a preliminary total of just $12 million in 2002 due to low prices for pink and sockeye salmon, the primary species harvested by the Kodiak fleet (Table 5). Preliminary information indicates that the number of permits fished in the Kodiak region declined from 354 in 2001 to 242 in 2002, a decline of 32 percent.

Table 5
Kodiak Area Commercial Salmon Harvest, 1999-2002
Millions of Pounds and Dollars

<table>
<thead>
<tr>
<th>Year</th>
<th>Ex-vessel Catch</th>
<th>Ex-vessel Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>72</td>
<td>$35</td>
</tr>
<tr>
<td>2000</td>
<td>62</td>
<td>21</td>
</tr>
<tr>
<td>2001</td>
<td>94</td>
<td>22</td>
</tr>
<tr>
<td>2002</td>
<td>87</td>
<td>12</td>
</tr>
</tbody>
</table>

Source: Alaska Department of Fish and Game

Kodiak’s commercial crab fleet derives most of its income from the Bristol Bay king crab and Bering Sea opilio fisheries. Catch in these two fisheries ranged from 205 million pounds in 1999 to 34 million pounds in 2001 and 2002. Value ranged from $261 million in 1999 to $81 million in 2001 (Table 6). Most of the decline was due to the Bering Sea opilio fishery, which declined from 194 million pounds worth $190 million in 1999 to just 25 million pounds worth about $40 million in both 2001 and 2002.

Table 6
Commercial Crab Harvest in the Bering Sea Opilio and Bristol Bay King Crab Fisheries, 1999-2002
Millions of Pounds and Dollars

<table>
<thead>
<tr>
<th>Year</th>
<th>Opilio</th>
<th>Red King</th>
<th>Total Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>194</td>
<td>11</td>
<td>$261</td>
</tr>
<tr>
<td>2000</td>
<td>34</td>
<td>8</td>
<td>101</td>
</tr>
<tr>
<td>2001</td>
<td>25</td>
<td>9</td>
<td>81</td>
</tr>
<tr>
<td>2002</td>
<td>25</td>
<td>9</td>
<td>94</td>
</tr>
</tbody>
</table>

Source: Alaska Department of Fish and Game

Trends for Kodiak Resident Fishermen

Permit and earnings data by community of residence were available through 2000 from CFEC.

In 2000, 594 Kodiak Island Borough residents participated in commercial fishing as permit holders, fishing a total of 1,063 permits (Table 7). This was an increase of both permit holders and permits fished from 1999.

Additionally, 1,178 crew member licenses were sold to Kodiak residents in 2000, a decline of 13 licenses from 1999. Permit holders who work as crew are not included in this crew total.
Nearly one in five of Kodiak’s 9,400 adult residents participated in commercial fish harvesting as a permit holder or crew member during 2000, a total of 1,770 individuals.

<table>
<thead>
<tr>
<th>Year</th>
<th>Permit Holders Fishing</th>
<th>Permits Fished</th>
<th>Landings (Millions of Pounds)</th>
<th>Gross Earnings (Millions of Dollars)</th>
<th>Gross Earnings per Permit Holder</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>610</td>
<td>1,096</td>
<td>335</td>
<td>$119</td>
<td>$196,000</td>
</tr>
<tr>
<td>1996</td>
<td>578</td>
<td>1,092</td>
<td>241</td>
<td>98</td>
<td>170,000</td>
</tr>
<tr>
<td>1997</td>
<td>583</td>
<td>1,111</td>
<td>244</td>
<td>98</td>
<td>168,000</td>
</tr>
<tr>
<td>1998</td>
<td>547</td>
<td>996</td>
<td>286</td>
<td>82</td>
<td>149,000</td>
</tr>
<tr>
<td>1999</td>
<td>588</td>
<td>1,030</td>
<td>261</td>
<td>115</td>
<td>193,000</td>
</tr>
<tr>
<td>2000</td>
<td>594</td>
<td>1,063</td>
<td>220</td>
<td>90</td>
<td>151,000</td>
</tr>
<tr>
<td>Average</td>
<td>583</td>
<td>1,065</td>
<td>265</td>
<td>$100</td>
<td>$171,000</td>
</tr>
</tbody>
</table>

Source: Alaska Commercial Fisheries Entry Commission

During 2000, Kodiak permit holders landed 220 million pounds of seafood, a 16 percent decline from 1999. Earnings were $90 million, a decline of 21 percent from 1999. Most of the overall decline from 1999 was due to a $21 million decline in the value of crab and $8 million decline in the value of salmon (Table 8).

Ranked by Kodiak resident permit holders’ income, groundfish fisheries accounted for the highest value in 2000 ($28 million), followed by halibut ($27 million), salmon ($16 million), crab ($12 million), sablefish ($4 million), herring ($2 million), and all other fisheries combined ($1 million, Table 8).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Crab</td>
<td>$24</td>
<td>$17</td>
<td>$19</td>
<td>$22</td>
<td>$33</td>
<td>$12</td>
</tr>
<tr>
<td>Groundfish</td>
<td>39</td>
<td>33</td>
<td>36</td>
<td>19</td>
<td>29</td>
<td>28</td>
</tr>
<tr>
<td>Sablefish</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Halibut</td>
<td>12</td>
<td>14</td>
<td>21</td>
<td>12</td>
<td>22</td>
<td>27</td>
</tr>
<tr>
<td>Herring</td>
<td>6</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Salmon</td>
<td>33</td>
<td>18</td>
<td>14</td>
<td>22</td>
<td>24</td>
<td>16</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>$119</td>
<td>$98</td>
<td>$98</td>
<td>$82</td>
<td>$115</td>
<td>$90</td>
</tr>
</tbody>
</table>

Source: Alaska Commercial Fisheries Entry Commission

The top five gear types and fisheries for Kodiak resident harvesters were groundfish otter trawl ($16 million), large vessel halibut longline ($15 million), small boat halibut longline ($12 million), salmon purse seining ($9 million) and Tanner crab pot gear ($8 million). The highest level of participation in terms of permits fished were in the groundfish fisheries (311 permits), followed by salmon (292), and halibut (261)(Table 9).

Economic Impacts from Fishing Restrictions on the Kodiak Economy

McDowell Group, Inc. • Page 11
<table>
<thead>
<tr>
<th>Permit Code</th>
<th>Fishery</th>
<th>Permits Fished</th>
<th>Pounds</th>
<th>Gross Earnings</th>
<th>Avg. Gross Earnings</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>D 09J</td>
<td>Dungeness Crab &gt; 60' vessel</td>
<td>6</td>
<td>73,000</td>
<td>$121,000</td>
<td>$20,000</td>
<td>Actual</td>
</tr>
<tr>
<td>D 91J</td>
<td>Dungeness Crab &lt; 60' vessel</td>
<td>5</td>
<td>91,000*</td>
<td>$160,000</td>
<td>$32,000</td>
<td>Fishery Avg.</td>
</tr>
<tr>
<td>K 91T</td>
<td>Bristol Bay King Crab, &gt; 60' vessel</td>
<td>34</td>
<td>889,000</td>
<td>$4,294,000</td>
<td>$126,000</td>
<td>Actual</td>
</tr>
<tr>
<td>K 09T</td>
<td>King Crab, Pot Gear, &lt; 60' vessel</td>
<td>1</td>
<td>11,000</td>
<td>$51,000</td>
<td>$51,000</td>
<td>Fishery Avg.</td>
</tr>
<tr>
<td>K 91K</td>
<td>King Crab, Pot Gear, &gt; 60' vessel</td>
<td>1</td>
<td>Data not available due to State confidentiality standards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T 91Q</td>
<td>Tanner Crab &gt; 60' Vessel, Bering S.</td>
<td>35</td>
<td>4,043,000</td>
<td>$7,557,000</td>
<td>$216,000</td>
<td>Actual</td>
</tr>
<tr>
<td>T 91 QD</td>
<td>King Crab Bering S. CDQ</td>
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<td>Data not available due to State confidentiality standards</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Crab</strong></td>
<td></td>
<td>83</td>
<td>5,229,000</td>
<td>$12,390,000</td>
<td>$149,000</td>
<td>Actual</td>
</tr>
<tr>
<td>C 06B</td>
<td>Sablefish Longline &lt; 60' (NOT SE OR PWS)</td>
<td>22</td>
<td>1,153,000</td>
<td>$2,423,000</td>
<td>$110,000</td>
<td>Actual</td>
</tr>
<tr>
<td>C 61B</td>
<td>Sablefish Longline &gt; 60' vessel statewide</td>
<td>20</td>
<td>898,000</td>
<td>$1,973,000</td>
<td>$99,000</td>
<td>Actual</td>
</tr>
<tr>
<td><strong>Total Sablefish</strong></td>
<td></td>
<td>42</td>
<td>2,051,000</td>
<td>$4,396,000</td>
<td>$209,000</td>
<td>Actual</td>
</tr>
<tr>
<td>I 26B</td>
<td>Ling Cod Mechanical Jig</td>
<td>1</td>
<td>2,600</td>
<td>$1,700</td>
<td>$1,700</td>
<td>Fishery Avg.</td>
</tr>
<tr>
<td>M 05B</td>
<td>Misc. Finfish Hand Troll</td>
<td>9</td>
<td>61,000</td>
<td>$25,000</td>
<td>$2,700</td>
<td>Actual</td>
</tr>
<tr>
<td>M 06B</td>
<td>Misc. Finfish Longline, &lt; 60'</td>
<td>50</td>
<td>3,826,000</td>
<td>$1,502,000</td>
<td>$30,000</td>
<td>Actual</td>
</tr>
<tr>
<td>M 07B</td>
<td>Misc. Finfish Otter Trawl</td>
<td>33</td>
<td>119,665,000</td>
<td>$16,284,000</td>
<td>$493,000</td>
<td>Actual</td>
</tr>
<tr>
<td>M 09B</td>
<td>Misc. Finfish Pot Gear, &lt; 60' vessel</td>
<td>56</td>
<td>9,780,000</td>
<td>$3,467,000</td>
<td>$62,000</td>
<td>Actual</td>
</tr>
<tr>
<td>M 26B</td>
<td>Misc. Finfish Mechanical Jig</td>
<td>98</td>
<td>1,613,000</td>
<td>$640,000</td>
<td>$6,500</td>
<td>Actual</td>
</tr>
<tr>
<td>M 61B</td>
<td>Misc. Finfish Longline, &gt;60'</td>
<td>8</td>
<td>1,357,000</td>
<td>$541,000</td>
<td>$68,000</td>
<td>Actual</td>
</tr>
<tr>
<td>M 91B</td>
<td>Misc. Finfish Pot Gear, &gt;60'</td>
<td>56</td>
<td>14,722,000</td>
<td>$5,054,000</td>
<td>$50,000</td>
<td>Actual</td>
</tr>
<tr>
<td><strong>Total Groundfish</strong></td>
<td></td>
<td>311</td>
<td>151,026,000</td>
<td>$27,514,000</td>
<td>$88,000</td>
<td>Actual</td>
</tr>
<tr>
<td>B 26B</td>
<td>Halibut Mechanical Jig</td>
<td>16</td>
<td>33,000</td>
<td>74,000</td>
<td>4,600</td>
<td>Actual</td>
</tr>
<tr>
<td>B 06B</td>
<td>Halibut Longline Vessel &lt; 60'</td>
<td>154</td>
<td>4,917,000</td>
<td>$12,136,000</td>
<td>$79,000</td>
<td>Actual</td>
</tr>
<tr>
<td>B 61B</td>
<td>Halibut Longline &gt; 60'</td>
<td>91</td>
<td>5,887,000</td>
<td>$14,512,000</td>
<td>$159,000</td>
<td>Actual</td>
</tr>
<tr>
<td><strong>Total Halibut</strong></td>
<td></td>
<td>261</td>
<td>10,837,000</td>
<td>$26,722,000</td>
<td>$102,000</td>
<td>Actual</td>
</tr>
<tr>
<td>G 01A</td>
<td>Roe Herring Purse Seine</td>
<td>1</td>
<td>187,000</td>
<td>$54,000</td>
<td>$54,000</td>
<td>Fishery Avg.</td>
</tr>
<tr>
<td>G 01K</td>
<td>Roe Herring, Purse Seine, Kodiak</td>
<td>13</td>
<td>1,677,000</td>
<td>$582,000</td>
<td>$45,000</td>
<td>Fishery Avg.</td>
</tr>
<tr>
<td>G 01T</td>
<td>Roe Herring, Purse Seine, Bristol By.</td>
<td>18</td>
<td>4,383,000</td>
<td>$412,000</td>
<td>$23,000</td>
<td>Actual</td>
</tr>
<tr>
<td>G 34K</td>
<td>Roe Herring, Gill Net, Kodiak</td>
<td>6</td>
<td>108,000</td>
<td>$31,000</td>
<td>$5,100</td>
<td>Fishery Avg.</td>
</tr>
<tr>
<td>G 34T</td>
<td>Roe Herring, Gill Net, Bristol Bay</td>
<td>1</td>
<td>5,600</td>
<td>$300</td>
<td>$900</td>
<td>Fishery Avg.</td>
</tr>
<tr>
<td>H 01M</td>
<td>Herring Food/Bait Purse Seine, Peninsula/Aleutians</td>
<td>3</td>
<td>604,000</td>
<td>$121,000</td>
<td>$40,000</td>
<td>Fishery Avg.</td>
</tr>
<tr>
<td><strong>Total Herring</strong></td>
<td></td>
<td>43</td>
<td>9,643,000</td>
<td>$1,517,000</td>
<td>$35,000</td>
<td>Actual</td>
</tr>
</tbody>
</table>

Source: Alaska Commercial Fisheries Entry Commission

1. Some data was confidential. For these gear groups, fishery average harvest and earnings were used. These estimates are denoted as underlined. Totals may not reflect sums of column items because although data for some fisheries was confidential, the totals by species groupings were available except for groundfish, where the sum of CFEC and fishery averages was used.
### Table 9 (continued)
#### Kodiak Resident Commercial Fishing Permits
#### Landings and Earnings, 2000

<table>
<thead>
<tr>
<th>Permit Code</th>
<th>Fishery</th>
<th>Permits Fished</th>
<th>Pounds</th>
<th>Gross Earnings</th>
<th>Avg. Gross Earnings</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>S 01A</td>
<td>Salmon Purse Seine Southeast</td>
<td>3</td>
<td>1,211,000</td>
<td>$25,000</td>
<td>$106,000</td>
<td>Fishery Avg.</td>
</tr>
<tr>
<td>S 01K</td>
<td>Salmon Purse Seine Kodiak</td>
<td>131</td>
<td>28,871,000</td>
<td>$9,391,000</td>
<td>$72,000</td>
<td>Actual</td>
</tr>
<tr>
<td>S 01L</td>
<td>Salmon Purse Seine Chignik</td>
<td>11</td>
<td>1,864,000</td>
<td>$1,403,000</td>
<td>$128,000</td>
<td>Fishery Avg.</td>
</tr>
<tr>
<td>S 02K</td>
<td>Salmon Beach Seine, Kodiak</td>
<td>2</td>
<td>Data not available due to State confidentiality standards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S 03E</td>
<td>Salmon Drift Gillnet, PWS</td>
<td>4</td>
<td>99,000</td>
<td>$109,000</td>
<td>$27,000</td>
<td>Actual</td>
</tr>
<tr>
<td>S 03H</td>
<td>Salmon Drift Gillnet, Cook Inlet</td>
<td>6</td>
<td>83,000</td>
<td>$54,000</td>
<td>$9,000</td>
<td>Actual</td>
</tr>
<tr>
<td>S 03M</td>
<td>Salmon Drift Gillnet, Peninsulas/Aleutians</td>
<td>4</td>
<td>374,000</td>
<td>$311,000</td>
<td>$78,000</td>
<td>Actual</td>
</tr>
<tr>
<td>S 03T</td>
<td>Salmon Drift Gillnet, Bristol Bay</td>
<td>25</td>
<td>1,421,000</td>
<td>$940,000</td>
<td>$38,000</td>
<td>Actual</td>
</tr>
<tr>
<td>S 04K</td>
<td>Salmon Set Gillnet, Kodiak</td>
<td>94</td>
<td>6,908,000</td>
<td>$3,595,000</td>
<td>$38,000</td>
<td>Actual</td>
</tr>
<tr>
<td>S 04T</td>
<td>Salmon Set Gillnet, Bristol Bay</td>
<td>11</td>
<td>275,000</td>
<td>$181,000</td>
<td>$16,000</td>
<td>Actual</td>
</tr>
<tr>
<td>S 04W</td>
<td>Salmon Gillnet, Kuskokwim</td>
<td>1</td>
<td>6,000</td>
<td>$2,000</td>
<td>$2,000</td>
<td>Fishery Avg.</td>
</tr>
<tr>
<td><strong>Total Salmon</strong></td>
<td></td>
<td><strong>292</strong></td>
<td><strong>41,056,000</strong></td>
<td><strong>$16,112,000</strong></td>
<td><strong>$55,000</strong></td>
<td><strong>Actual</strong></td>
</tr>
<tr>
<td>O 09B</td>
<td>Octopus/Squid Pot &lt; 60' Vessel</td>
<td>17</td>
<td>85,000</td>
<td>$31,000</td>
<td>$2,000</td>
<td>Actual</td>
</tr>
<tr>
<td>O 91B</td>
<td>Octopus/Squid Pot &gt; 60' Vessel</td>
<td>3</td>
<td>4,200</td>
<td>$1,600</td>
<td>$500</td>
<td>Fishery Avg.</td>
</tr>
<tr>
<td>O 11B</td>
<td>Sea Cucumber Diving</td>
<td>7</td>
<td>40,000</td>
<td>$57,000</td>
<td>$8,000</td>
<td>Actual</td>
</tr>
<tr>
<td>U 11B</td>
<td>Sea Urchin Diving</td>
<td>3</td>
<td>Data not available due to State confidentiality standards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W 22B</td>
<td>Scallop Dredge</td>
<td>1</td>
<td>71,000</td>
<td>$281,000</td>
<td>$281,000</td>
<td>Fishery Avg.</td>
</tr>
<tr>
<td><strong>Total Other Shellfish</strong></td>
<td></td>
<td><strong>31</strong></td>
<td><strong>388,000</strong></td>
<td><strong>$1,050,000</strong></td>
<td><strong>$34,000</strong></td>
<td><strong>Actual</strong></td>
</tr>
<tr>
<td><strong>TOTAL KODIAK</strong></td>
<td></td>
<td><strong>1,063</strong></td>
<td><strong>220,000,000</strong></td>
<td><strong>$90,000,000</strong></td>
<td><strong>$85,000</strong></td>
<td><strong>N/A</strong></td>
</tr>
</tbody>
</table>

Source: Alaska Commercial Fisheries Entry Commission.

1. Some data was confidential. For these gears, fishery average harvest and earnings were used. These estimates are denoted as underlined italics. Totals may not reflect sums of column items because although data for some fisheries was confidential, the totals by species groupings were available except for groundfish, where the sum of CFEC and fishery averages was used.

### 2000 Kodiak Seafood Harvesting Employment and Earnings Estimates

McDowell Group updated the 1999 employment and payroll estimates with 2000 data from CFEC. This is the most recent year of complete data, according to CFEC. These estimates of annual average employment and take-home pay of Kodiak-based skippers and crew are essential because most government reports do not include employment or personal income from seafood harvesting. Kodiak's most important industry. The source for all other employment data, the Alaska Department of Labor, expresses employment in annual average 12-month equivalents. Harvesting employment estimates use this method to be comparable.

Following the methods used in McDowell Group's 1989 *Alaska Seafood Industry Study*, the study team considered the preparation and fishing time and assigned months of participation to each fishery. Typical crew sizes were assumed for various size vessels. Net earnings as a percent of gross fishery earnings were estimated. The effects of the same vessels and crews being used for different fisheries were considered. Finally, the assumption was made that Kodiak vessels were crewed primarily by Kodiak residents. The result was about 946 seafood harvesting jobs and
$49 million in skipper and crew personal income, comparable to 12-month land-based salaries and wages (Table 10).

Groundfish and salmon fisheries are the leading employers, with groundfish providing 364 annual average jobs and salmon providing 318 jobs. IFQ holders fishing for halibut provide another 158 jobs, with sablefish, crab, herring and other species combining for about 106 jobs.

<table>
<thead>
<tr>
<th>Fishery</th>
<th>Permits Fished</th>
<th>Annual Average Jobs</th>
<th>Gross Earnings (Millions of Dollars)</th>
<th>Estimated Payroll (Millions of Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crab</td>
<td>83</td>
<td>32</td>
<td>$12</td>
<td>$7</td>
</tr>
<tr>
<td>Groundfish</td>
<td>311</td>
<td>364</td>
<td>28</td>
<td>14</td>
</tr>
<tr>
<td>Sablefish</td>
<td>42</td>
<td>28</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Halibut</td>
<td>261</td>
<td>158</td>
<td>27</td>
<td>17</td>
</tr>
<tr>
<td>Herring</td>
<td>43</td>
<td>34</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>Salmon</td>
<td>292</td>
<td>318</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>31</td>
<td>12</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,063</strong></td>
<td><strong>946</strong></td>
<td><strong>$90</strong></td>
<td><strong>$49</strong></td>
</tr>
</tbody>
</table>

Source: Permits fished and gross earnings, Commercial Fisheries Entry Commission. Annual employment and estimated payroll are estimates by McDowell Group, Inc., based on standard crew sizes, months of participation in each fishery, and study team estimates of net “take-home pay” by skippers and crew. Sum of column values may not add due to rounding.
Seafood Processing

Kodiak is a major seafood port, consistently ranking among America’s top three seafood ports in terms of ex-vessel value. Kodiak processors processed an average of over 300 million pounds of seafood worth an average ex-vessel value of $88 million a year between 1997 and 2001 (Tables 11 and 12). Total groundfish volume has declined over the past 4 years due to declining harvests.

**Table 11**

Ex-Vessel Landings of Seafood at Kodiak, 1997-2001

(Millions of Pounds)

<table>
<thead>
<tr>
<th>Species</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crab</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bering Sea Snow Crab</td>
<td>0.1</td>
<td>0.4</td>
<td>0.3</td>
<td>1.5</td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td>Dungeness Crab</td>
<td>0.6</td>
<td>0.5</td>
<td>0.6</td>
<td>0.3</td>
<td>0.2</td>
<td>0.4</td>
</tr>
<tr>
<td>Bristol Bay King Crab</td>
<td>0.4</td>
<td>0.3</td>
<td>0.5</td>
<td>0.9</td>
<td>0.8</td>
<td>0.6</td>
</tr>
<tr>
<td><strong>Total Crab</strong></td>
<td>1.1</td>
<td>1.2</td>
<td>1.4</td>
<td>2.7</td>
<td>1.4</td>
<td>1.5</td>
</tr>
<tr>
<td>Groundfish</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pollock</td>
<td>63.3</td>
<td>165.8</td>
<td>130.5</td>
<td>102.2</td>
<td>90.8</td>
<td>114.5</td>
</tr>
<tr>
<td>Pacific Cod</td>
<td>73.1</td>
<td>72.0</td>
<td>85.0</td>
<td>64.9</td>
<td>54.7</td>
<td>69.9</td>
</tr>
<tr>
<td>Flatfish</td>
<td>19.8</td>
<td>13.7</td>
<td>8.3</td>
<td>14.8</td>
<td>15.1</td>
<td>14.3</td>
</tr>
<tr>
<td>Pacific Ocean Perch</td>
<td>4.8</td>
<td>5.4</td>
<td>5.6</td>
<td>9.0</td>
<td>9.0</td>
<td>6.8</td>
</tr>
<tr>
<td>Rockfish</td>
<td>3.0</td>
<td>6.3</td>
<td>8.1</td>
<td>9.2</td>
<td>6.5</td>
<td>6.6</td>
</tr>
<tr>
<td>Black Rockfish</td>
<td>0.2</td>
<td>0.2</td>
<td>0.1</td>
<td>0.3</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Total Groundfish</strong></td>
<td>184.2</td>
<td>263.4</td>
<td>237.6</td>
<td>200.4</td>
<td>176.3</td>
<td>212.3</td>
</tr>
<tr>
<td>Sablefish</td>
<td>3.9</td>
<td>3.6</td>
<td>3.2</td>
<td>3.4</td>
<td>2.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Salmon</td>
<td>57.8</td>
<td>105.6</td>
<td>70.5</td>
<td>61.8</td>
<td>78.8</td>
<td>74.9</td>
</tr>
<tr>
<td>Halibut</td>
<td>11.0</td>
<td>9.1</td>
<td>9.9</td>
<td>9.3</td>
<td>8.5</td>
<td>9.6</td>
</tr>
<tr>
<td>Other Species</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Herring</td>
<td>8.0</td>
<td>4.9</td>
<td>3.3</td>
<td>2.7</td>
<td>3.1</td>
<td>4.4</td>
</tr>
<tr>
<td>Scallops</td>
<td>0.4</td>
<td>0.4</td>
<td>0.3</td>
<td>0.3</td>
<td>NA</td>
<td>0.4</td>
</tr>
<tr>
<td>Sea Cucumbers</td>
<td>0.1</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Octopus</td>
<td>0.2</td>
<td>0.3</td>
<td>0.3</td>
<td>0.2</td>
<td>NA</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Total Other Species</strong></td>
<td>8.7</td>
<td>5.7</td>
<td>4.1</td>
<td>3.3</td>
<td>3.3</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>TOTAL ALL SPECIES</strong></td>
<td>267.0</td>
<td>388.6</td>
<td>326.7</td>
<td>281.0</td>
<td>270.5</td>
<td>306.7</td>
</tr>
</tbody>
</table>

(Note: Totals may not reflect exact summation of columns due to rounding)

Source: Alaska Department of Fish and Game and Kodiak Island Borough
Pollock and Pacific cod alone account for about 60 percent of volume and 34 percent of value of seafood processed in Kodiak. The 2001 season marked the third annual decline in groundfish landings to Kodiak processors. Halibut landings to Kodiak processors have also steadily declined as increasing numbers of fishermen land their fish at Homer or Seward, where prices are higher. Salmon value has declined every year since 1998, and preliminary 2002 data indicates a fourth consecutive year of decline. Crab value landed in Kodiak increased annually from 1998 to 2001.

Table 12
Ex-Vessel Value of Seafood Landings at Kodiak, 1997-2001
(Millions of Dollars)

<table>
<thead>
<tr>
<th>Species</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>5-Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crab</td>
<td>3.1</td>
<td>2.0</td>
<td>2.8</td>
<td>3.4</td>
<td>4.9</td>
<td>3.2</td>
</tr>
<tr>
<td>Bering Sea Opilio Crab</td>
<td>$0.5</td>
<td>$0.1</td>
<td>$0.2</td>
<td>$1.3</td>
<td>$0.6</td>
<td>$0.5</td>
</tr>
<tr>
<td>Dungeness Crab</td>
<td>1.3</td>
<td>0.7</td>
<td>0.9</td>
<td>0.4</td>
<td>0.4</td>
<td>0.7</td>
</tr>
<tr>
<td>Bristol Bay King Crab</td>
<td>1.3</td>
<td>1.2</td>
<td>1.7</td>
<td>1.7</td>
<td>3.9</td>
<td>2.0</td>
</tr>
<tr>
<td>Total Crab</td>
<td>6.7</td>
<td>3.9</td>
<td>5.2</td>
<td>7.5</td>
<td>9.2</td>
<td>7.1</td>
</tr>
<tr>
<td>Groundfish</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pollock</td>
<td>8.1</td>
<td>11.6</td>
<td>13.1</td>
<td>8.7</td>
<td>12.7</td>
<td>10.8</td>
</tr>
<tr>
<td>Pacific Cod</td>
<td>15.5</td>
<td>13.7</td>
<td>25.5</td>
<td>24.0</td>
<td>15.9</td>
<td>18.9</td>
</tr>
<tr>
<td>Flatfish</td>
<td>3.5</td>
<td>2.2</td>
<td>1.3</td>
<td>2.7</td>
<td>2.9</td>
<td>2.5</td>
</tr>
<tr>
<td>Pacific Ocean Perch</td>
<td>0.2</td>
<td>0.4</td>
<td>0.5</td>
<td>0.7</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Rockfish</td>
<td>0.4</td>
<td>0.6</td>
<td>0.7</td>
<td>0.6</td>
<td>0.5</td>
<td>0.6</td>
</tr>
<tr>
<td>Black Rockfish</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Total Groundfish</td>
<td>27.8</td>
<td>28.6</td>
<td>41.2</td>
<td>36.8</td>
<td>32.5</td>
<td>33.4</td>
</tr>
<tr>
<td>Sablefish</td>
<td>8.0</td>
<td>5.2</td>
<td>5.7</td>
<td>7.0</td>
<td>6.9</td>
<td>6.6</td>
</tr>
<tr>
<td>Salmon</td>
<td>18.8</td>
<td>29.8</td>
<td>31.1</td>
<td>21.5</td>
<td>18.8</td>
<td>24.0</td>
</tr>
<tr>
<td>Halibut</td>
<td>21.0</td>
<td>10.0</td>
<td>20.6</td>
<td>23.1</td>
<td>16.2</td>
<td>18.2</td>
</tr>
<tr>
<td>Other Species</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Herring</td>
<td>1.3</td>
<td>0.7</td>
<td>0.8</td>
<td>0.7</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Scallops</td>
<td>2.6</td>
<td>2.6</td>
<td>1.7</td>
<td>1.7</td>
<td>NA</td>
<td>2.2</td>
</tr>
<tr>
<td>Sea Cucumbers</td>
<td>0.2</td>
<td>0.2</td>
<td>0.1</td>
<td>0.2</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Octopus</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
<td>NA</td>
<td>0.1</td>
</tr>
<tr>
<td>Total Other Species</td>
<td>4.2</td>
<td>3.7</td>
<td>2.7</td>
<td>2.7</td>
<td>1.2</td>
<td>2.9</td>
</tr>
<tr>
<td>TOTAL ALL SPECIES</td>
<td>$82.9</td>
<td>$79.3</td>
<td>$103.9</td>
<td>$94.5</td>
<td>$80.5</td>
<td>$88.3</td>
</tr>
</tbody>
</table>

Source: Alaska Department of Fish and Game and Kodiak Island Borough
Groundfish is the mainstay of Kodiak’s processing industry, averaging 69 percent of volume and 38 percent of value from 1997 to 2001 (Tables 13 and 14). Salmon is second in both volume (24 percent) and value (27 percent). Halibut accounts for 3 percent of volume and 20 percent of value, with sablefish accounting for 1 percent of volume and 8 percent of value.

### Table 13

**Seafood Landings at Kodiak, 1997-2001**  
**Percent of Ex-Vessel Volume by Species**

<table>
<thead>
<tr>
<th>Species</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>5-Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groundfish</td>
<td>69%</td>
<td>68%</td>
<td>73%</td>
<td>71%</td>
<td>65%</td>
<td>69%</td>
</tr>
<tr>
<td>Salmon</td>
<td>22%</td>
<td>27%</td>
<td>22%</td>
<td>22%</td>
<td>29%</td>
<td>24%</td>
</tr>
<tr>
<td>Halibut</td>
<td>4%</td>
<td>2%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Herring</td>
<td>3%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Sablefish</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Crab</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Other</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Alaska Department of Fish and Game and Kodiak Island Borough

Even as the volume of groundfish processed in Kodiak has declined in recent years, the general decline in salmon value from 1997 to 2001 has increased the importance of groundfish as a percentage of total value processed.

### Table 14

**Seafood Landings at Kodiak, 1997-2001**  
**Percent of Ex-Vessel Value by Species**

<table>
<thead>
<tr>
<th>Species</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>5-Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groundfish</td>
<td>34%</td>
<td>36%</td>
<td>40%</td>
<td>39%</td>
<td>40%</td>
<td>38%</td>
</tr>
<tr>
<td>Salmon</td>
<td>23%</td>
<td>38%</td>
<td>30%</td>
<td>23%</td>
<td>23%</td>
<td>27%</td>
</tr>
<tr>
<td>Halibut</td>
<td>25%</td>
<td>13%</td>
<td>20%</td>
<td>24%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>Herring</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Sablefish</td>
<td>10%</td>
<td>7%</td>
<td>5%</td>
<td>7%</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>Crab</td>
<td>4%</td>
<td>3%</td>
<td>3%</td>
<td>4%</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
<td>4%</td>
<td>2%</td>
<td>2%</td>
<td>&lt;1%</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Alaska Department of Fish and Game and Kodiak Island Borough
Kodiak's processors rely heavily on groundfish as their largest volume of fish processed. Six processors (4 large and 2 small) who represent most of the processing capacity in Kodiak were interviewed for their relative volume of fish processed. All processors except one depend on groundfish for at least two-thirds of their volume (Table 15).

**Table 15**

**Volume of Seafood Processed by Kodiak Processors, 2001**

<table>
<thead>
<tr>
<th>Processor</th>
<th>Groundfish</th>
<th>Crab</th>
<th>Halibut</th>
<th>Sablefish</th>
<th>Herring</th>
<th>Salmon</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>65%</td>
<td>1%</td>
<td>3%</td>
<td>1%</td>
<td>15%</td>
<td>15%</td>
<td>100%</td>
</tr>
<tr>
<td>2</td>
<td>70%</td>
<td>1%</td>
<td>4%</td>
<td>2%</td>
<td></td>
<td>23%</td>
<td>100%</td>
</tr>
<tr>
<td>3</td>
<td>85%</td>
<td>1%</td>
<td>3%</td>
<td>1%</td>
<td></td>
<td>10%</td>
<td>100%</td>
</tr>
<tr>
<td>4</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>5</td>
<td>88%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12%</td>
<td>100%</td>
</tr>
<tr>
<td>6</td>
<td>45%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: McDowell Group, Inc. executive interviews with processor executives. Processors 1 through 4 are large processors (employment > 100), and processors 5 and 6 small processors (employment < 50).

Traditionally, Pacific cod and pollock are processed throughout most of the year. Reduced groundfish quotas after 1999 lowered the percentage of groundfish volume processed in the summer months. Even more important is the loss of groundfish processed from November through January, months when virtually no other species are processed in any substantial volume (Figure 3). Although groundfish may be lower in value per pound than other species, the large volume processed and the operation of the fishery in months when other species are not harvested are key to attracting and maintaining a local workforce in Kodiak.

Salmon and herring are processed during May through September. Halibut and sablefish are processed March through November, and rockfish processing peaks in July and August.
Figure 3
Volume of Seafood Processed in Kodiak, by Month, 1999 and 2001

Processing Employment

Unlike other areas of the state (Bristol Bay, for example) where processing plants operate seasonally and must import most of their workforce from outside Alaska, Kodiak’s year-round processing operations traditionally provide adequate employment and wages to enable most of the processing labor force to live in Kodiak year-round. This, however, may be changing.

A total of 14 shore-based processors operated in the Kodiak Island Borough in 2001. In 2002, three of the 10 largest processors -- Global Seafoods, Cook Inlet Processing, and Kodiak Salmon Packers -- closed their plants, as did Kodiak Seafood Processing. Department of Labor (DOL) Statistics show that processing employment increased from 1999 to 2000 and declined in 2001. To assess the impacts of the recent plant closures, the study team examined DOL employment data for the first half (January – June) of 2000, 2001 and 2002, and made estimates of employment for 2002 based on known plant closures (Table 16). Estimated employment for Kodiak shore-based processors will likely dip below 1,000 jobs in 2002.

Interviews with processors indicate that most of their workforce is still based in Kodiak. However, as mentioned earlier, more off-island labor is being used during
peak processing periods because resident processing workers are leaving Kodiak
due to lack of work from lower groundfish volume.

Table 16
Annual Average Employment by Kodiak Shore-based Processors,
1999 to 2001

<table>
<thead>
<tr>
<th>Processor</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ocean Beauty Seafoods</td>
<td>337</td>
<td>338</td>
<td>342</td>
<td>206</td>
</tr>
<tr>
<td>Trident Seafoods Corporation</td>
<td>100</td>
<td>184</td>
<td>184</td>
<td>188</td>
</tr>
<tr>
<td>Cook Inlet Processing (Polar Equipment)</td>
<td>206</td>
<td>228</td>
<td>191</td>
<td>1</td>
</tr>
<tr>
<td>North Pacific Processors</td>
<td>218</td>
<td>198</td>
<td>222</td>
<td>182</td>
</tr>
<tr>
<td>True World Foods (formerly International Seafoods)</td>
<td>208</td>
<td>147</td>
<td>126</td>
<td>157</td>
</tr>
<tr>
<td>Global Seafoods Kodiak LLC</td>
<td>7</td>
<td>137</td>
<td>74</td>
<td>1</td>
</tr>
<tr>
<td>Western Alaska Fisheries</td>
<td>137</td>
<td>110</td>
<td>126</td>
<td>133</td>
</tr>
<tr>
<td>Alaska Fresh Seafood</td>
<td>36</td>
<td>41</td>
<td>38</td>
<td>40</td>
</tr>
<tr>
<td>Kodiak Salmon Packers</td>
<td>21</td>
<td>29</td>
<td>28</td>
<td>1</td>
</tr>
<tr>
<td>Kodiak Fishmeal Company</td>
<td>17</td>
<td>16</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Wards Cove Packing Company</td>
<td>3</td>
<td>14</td>
<td>20</td>
<td>9</td>
</tr>
<tr>
<td>Island Seafoods</td>
<td>6</td>
<td>9</td>
<td>13</td>
<td>44</td>
</tr>
<tr>
<td>Kodiak Seafood Processing</td>
<td>15</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Kodiak Smoking &amp; Processing</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,314</strong></td>
<td><strong>1,458</strong></td>
<td><strong>1,387</strong></td>
<td><strong>985</strong></td>
</tr>
</tbody>
</table>

Source: Department of Labor and McDowell Group Estimates
Kodiak Raw Fish Tax Revenue

Alaska’s statewide landing and fisheries business taxes apply to seafood landed in each community and borough for processing. A portion of these proceeds is returned by the state to the community and the borough. The taxes received by the Kodiak Island Borough (KIB) in a given fiscal year reflect fisheries revenue from two years prior. For example, the 2002 taxes received by the KIB from the state reflect fisheries taxes collected by the state in 2000.

Payments received in FY 2003 show a sharp decline from FY 2002 payments (Table 17). Payments for FY 2004 are expected to be even lower given the continued decline of groundfish and salmon value during the 2002 fishing season.

### Table 17
Shared Fisheries Tax Received by the Kodiak Island Borough, FY 1999 - 2002

<table>
<thead>
<tr>
<th>Fiscal Year Received by Borough</th>
<th>Fishing Year in which Taxes were Collected</th>
<th>Value of Seafood Landed in Kodiak (millions of dollars)</th>
<th>Landing Tax</th>
<th>Fisheries Business Tax</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>1997</td>
<td>82.9</td>
<td>13,946</td>
<td>841,131</td>
<td>855,077</td>
</tr>
<tr>
<td>2000</td>
<td>1998</td>
<td>79.3</td>
<td>10,247</td>
<td>718,310</td>
<td>728,557</td>
</tr>
<tr>
<td>2001</td>
<td>1999</td>
<td>103.9</td>
<td>24,592</td>
<td>923,772</td>
<td>948,364</td>
</tr>
<tr>
<td>2002</td>
<td>2000</td>
<td>94.5</td>
<td>5,219</td>
<td>1,282,125</td>
<td>1,287,344</td>
</tr>
<tr>
<td>2003</td>
<td>2001</td>
<td>80.5</td>
<td>37,162</td>
<td>759,211</td>
<td>796,393</td>
</tr>
</tbody>
</table>

Source: Dept. of Revenue annual reports on shared taxes.
New Age Marketing of Rationalized Alaska King Crab

Model for Alaska crab coops: Debeers International Diamond Cartel

4L and 3L Bristol Bay red king crab = rare, exotic, edible, organic “diamonds for your palate”

Virtual Board of Directors of the Alaska King Crab Cartel:
- Crab fishermen and vessel owners
- Crab processors and shippers/handlers
- Crab town city councils
- State crab fishery regulators
- Federal crab fishery regulators

Mission of the Cartel

1. Establish and maintain highest quality standards from pot to plate

2. Annually optimize product diversity to de-commodify king crab as a bulk processed product and transform it into a “precious experience for savoring on special occasions with closest relatives and colleagues”: Alaska’s Dom Perignon (vintage 2002, 2003, 2004)

3. Establish a verifiable reputation as the most dependable world supplier and successful resource conservator: Bering Sea becomes a transparent, world-class live tank for king crab rearing and “just-in-time” harvesting

4. Continually upgrade “preferred customer” base using international auctions on October 17th each year a la Christie’s and Sotheby’s in New York (modeled after Beaujolais Nouveau “experience” each November and Copper River salmon “arrival” each May)

5. Manage the annual supply to generate the best returns for local economies, fishermen, vessel owners, processors, the GDP and U.S. trade balance

6. As an insurance policy for all stakeholders, establish within each coop a tactical marketing committee or grant coops the first wholesale right-of-refusal on all cartel products

7. Alaska King Crab Coop’s Anthem:

This crab is your crab. This crab is our crab.
From the Russian Border to the Emerald Island.
From each careful pot lift to your special banquet
Alaska king crab is made for you and me.

Submitted to the NPFMC on December 5, 2002 by Tom Casey

tcasey@wolfenet.com
(206) 849-6752
November 30, 2002

Dave Hanson, Chairman
NPFMC Community Protection Committee
North Pacific Fishery Management Council
605 West 4th Ave Suite 306
Anchorage, AK 99501

Dear Dave,

The City of Unalaska hereby submits its opening comments for the December 3rd 2002 Community Protection Committee meeting. We look forward to working you and all other members of the committee in the spirit of cooperation to accomplish this very important task that is important to all members of the committee.

The City of Unalaska has been the major Bering Sea crab fishing port for well over 30 years, as well as this nations number one overall commercial fishing port for 13 straight years for volume of tonnage landed and number one in value in 11 of the past 13 years. Well over half of the Bering Sea fleet of 260 vessels makes their crab landings to processing operations located in Unalaska. The BSAI crab fisheries have always been a very important segment of the overall economy of Unalaska, even with the development of the groundfish operations in Unalaska in the late 1980’s revenue generated from the crab fisheries has been a major source of revenue for the community. The revenue generated from local and state shared fish taxes, sale taxes and the importance of business opportunities for the communities support sector businesses many of which located in Unalaska many years ago to support the BSAI crab fleet cannot be understated.

The processing operations in Unalaska have also made large investments in their operations to support the BSAI crab fisheries many plants have made large upgrades in there facilities in the past eight to ten years to provide improved capacity to support the fleet during the large harvest quotas for Opilio snow crab.
The importance of the crab processing plants in Unalaska can’t be understated; they provide markets for over half the Bering Sea crab fleet. The taxes they generate from fish taxes, sale taxes, property taxes and the employment they provide is critical to Unalaska’s overall all economy. During the past few years of low crab quotas and closed fisheries the revenue from crab is still very important to Unalaska due to its higher value than groundfish as and example during the 2002 Bristol Bay Red King Crab fishery one third of our projected FY03 local fisheries 2% landing tax was archived during that three day fishery.

Getting back to task the committee faces we will work in good faith during this process and will consider fairly all options brought forward. We support rationalization of the Bering Sea Crab fisheries and Unalaska has seen first hand the benefits of the rationalized BSAI Pollock fishery and feel many benefits seen in that fishery can be achieved when the BSAI crab fisheries are rationalized. Having said that; we as a community feel that during the rationalization process that we have taken some hits that will affect crab landings to Unalaska and will impact revenues to the community, to are support sector businesses and the local processing plants. The direct allocations of Brown King Crab to community of Adak, increases to the crab CDQ program, Unalaska is not a CDQ community and only a small amount of CDQ landing are made to Unalaska, these allocations will have impacts on our community. At this time we would have to take a hard look at any new proposals that were heading in that direction. Listed below are Unalaska’s comments on issues and options for the first Community Protection Committee meeting.

3.4 Community Protection Option #1, this option, which you may recall was the option that Unalaska had been supporting until the new option three appeared at the October meeting. If Option one is still in play and I believe it still is. This option talks about processing history may leave an eligible community of origin in which the history was established with permission of the eligible community. I would add language to this option that would spell out a financial agreement between the community and the processor that is wanting to move his shares based on fish taxes both local and state shared, sale taxes and possibly property taxes both real and personal could be added to the mix if the plant was moving totally out of the community. In the case the processing operation and community couldn’t come to an agreement then language could be added that they would go into arbitration to arrive at and agreement. I would also change the number of days that paper work would have to be filed with the Secretary of Commerce from 30 days to 90 days before the quota shares could leave the community. Also in this section it talks about eligible communities being those that have landings in the 0 to 8% range of the species for which processor QS is awarded during the qualifying period. I would add the new language that is listed below.
Page Three
Letter to Dave Hanson Chairman, NPFMC Community Protection Committee.

Eligible communities shall be defined as any community in which the aggregate (community) landings exceed 3%. That would eliminate a few communities that only have a few deliveries in their landing history and really don't depend on the BSAI crab fisheries.

Transfers of IPQ out of the region are prohibited. We believe that should be supported. Another Option in this section from the June Council Motion that states the amount of IPQ in any year shall not exceed the percentage of the TAC for any crab species is as follows.

1. IPQ percentage times a TAC of 150 million lbs.
2. IPQ percentage times a TAC of 200 million lbs.

We have concerns with both of these options; if we had to support one of them it would be number two. This option would limit the processor quota share on years of high quotas and would allow a larger amount of open access crab that wouldn't be regionalized for deliveries. This could cause Unalaska to lose open access crab to other communities inside the region or outside the region.

3.4 Community Protection Option #2, I would delete this option. It doesn't provide any protection inside the region, which I believe, is very important to Unalaska, especially in the southern region where you have many more communities and processing operations than the northern region.

3.4 Community Protection Option #3 this option came forward at the October meeting. This option should be supported it allows a local government entity such as Unalaska to have the first right of refusal to acquire both processing and harvesting shares. I would change the 1% figure needed to be eligible to 3% of initial distribution of processing history from any BSAI fishery.

I would propose one sub option under first right of refusal in this section that would allow communities with two or more processing operations the first right of refusal on acquiring processing and harvesting shares. I bring this up as a way to keep a municipality or a community organization out of the quota share brokering business, which it isn't set up to deal with. The sub-option would read as follows.

Sub -option Right of First Refusal, In communities with two or more processing facilities. Allow communities the option to allow local processing companies the first right of refusal on purchasing processing quota shares, which are being proposed to be transferred for processing outside the boundaries of the community. Processing shares acquired this way would be non-transferable outside the community and non-transferable by a company that acquired those shares that has processing operations located in another community.
Transfers of PQS, and IPQs included in the 10% or poundage option located in the Cooling off period option from the October motion would still be allowed. In the case that the processors didn't come to an agreement to acquire the processing quota shares the first right of refusal would revert back to the local government, CDQ groups or community organization group.

Cooling off period option, they have listed the options as 2,3,and 5 years for the movement of any processing quota is allowed when the rationalization program goes into affect. We support at least 2 years, and this option would only be for processor shares. Harvester share could still be sold or transferred which I believe is needed due to fact that many harvesters want to divest and get out of the business which will in turn reduce vessel effort in the crab fisheries.

Options for closed fisheries and captains' shares, I believe that the regionalization tag should apply when these fisheries reopen and the same should apply for Captains' shares this amount of quota isn't going to be large amount poundage and will most likely go with the vessel when it makes its delivery to a regionalized port.

This concludes the City of Unalaska comments at this time.

Sincerely

Frank Kelty
Resource Analyst
City of Unalaska
AP motions on Crab EIS Analysis and Alternatives during 2002

The AP has consistently requested analysis of a broader set of alternative be included in the EIS for the final decision on Crab Rationalization. Those alternatives fall into three basic sets:

I. One pie system with regionalization and skipper shares.
   - Direct allocation of IFQ to processors based on crab specific non-malleable (stranded) capital.
   - Closed class of processors with aggregate processing allocation.
II. Coops with incentive to join and disincentive to move between coops
III. Mitigated IFQ/IPQ system
   - Alternative A/B splits (50/50, 75/25, etc.)
   - Mitigation of PQ Alternative through an “open port” provision

Details of the AP EIS recommendations based on AP minutes for the 2002 meetings are excerpted below:

AP Motion – February 2002 meeting:

C-5 Crab Rationalization
The AP agrees with the SSC’s recommendation of revisiting the problem statement for BSAI Crab Rationalization to provide greater clarity regarding the processor and community concerns that rationalization seeks to address; and that the analysis be complete with respect to all the customary information which otherwise meets the requirements of an IRFA, RIR, EA etc., prior to submission to congress, Motion passed 18-0.
In addition, the AP recommends the following additions and clarifications be included in the crab rationalization analysis before sending the document out for public review:
1) The Initial Council Review Draft of the plurality coop is complete. Further analysis should focus on the options for an individual quota framework – both one-pie and two-pie – for management of the BSAI crab fisheries. The analysis should include a discussion of the use of the voluntary cooperative as a fishery management tool within the individual quota framework.
2) The analysis should include information on the alternative fisheries that harvesters and processors have participated in, so that alternative allocation options can be better assessed based on an individual harvester or processor’s dependence on a particular crab fishery.
3) The amount of stranded capital in the processing sector should be analyzed. Options for addressing the stranded processing capital issue, such as a processor buyback program should also be discussed.
4) The effect of regionalization on ownership caps should be added to the analysis.
5) The analysis should include a qualitative discussion of cumulative impacts of the options on different classes of vessels.
Motion passed 16/0

AP Motion – April 2002 meeting:

C-5 BSAI Crab Rationalization

Minority Report
The following AP members believe that the Bering Sea Crab Rationalization Alternatives document should include the following option for analysis:
Initial Allocation of Harvester QS (option 1.2 new sub-option)
(a) Reserve (0-20%) of QS pool for allocation to eligible processors (as defined by 2.1) to be distributed according to the formula in 2.3. This allocation would be in lieu of IPO allocations. The current analysis is focused on a strict one pie option or a complete two pie system. Interested parties are generally polarized behind one model or the other. The two pie option clearly shifts bargaining power toward the processing sector and depends entirely on a successful arbitration model – which is yet to be achieved – for processor accountability. On the other hand, the one pie option minimizes processor concerns. A third option within the one pie concept, which recognizes processor desire for equity and provides QS for processors but does not provide a class of processor shares (IPQs) issued in perpetuity, will provide a middle ground for stakeholders and become a better choice for the Council.
Early recommendations by Scott Matlich, the State’s economist, identified that a one pie system, modified in this way, was a model that would protect processors. A modified one pie system is similar to current rationalization systems and its results are more predictable. The two pie approach is entirely theoretical, abstract and has never been tried. Its evaluation in the analysis, based on game theory, may not be reliable. Adopting the two pie system could have significant unintended consequences.
Concerns processors have about keeping their traditional fishermen in a rationalized fishery can be addressed by processor-issued harvesting shares. The processors can use their shares as incentives to existing fishermen, leverage to obtain new fishermen or realize their value through having them fished on a harvesting vessel. A two pie system in combination with rationalization, is likely to result in high transaction costs associated with matching up appropriately designated pieces of the two pies.
Signed by: David Fraser, Dan Falvey, Michelle Ridgway, Hazel Nelson, Duncan Fields, Jeff Stephan

(b) Bering Sea Crab EIS
The AP appreciates the staff’s efforts in developing the preliminary draft materials on the EIS for the FMP for BSAI King and Tanner Crab fisheries. The AP recommends the Council request staff to build the analysis to include discussion of the following issues:
1. Clarify, prioritize and develop objectives and benchmarks for the conservation goals identified in the problem statement.
2. Develop a table summarizing the conservation goals and objectives that the public may use to efficiently contrast the environmental benefits and impacts of the alternatives and elements.
3. Include a discussion of the suite of mitigation tools which may be applied to address resource conservation concerns emerging under each alternative.
4. Expand discussion of impacts to the human environment under each of the various rationalization alternatives considered in the analysis.
Motion passed unanimously.

AP Motion – June 2002 meeting:

Crab EIS
The AP recommends the Council request staff to analyze the following alternatives in the BSAI Crab FMP EIS.

Alternative 1: Status quo
Alternative 2: A 2-pie model such as the suite of elements and options identified in the AP motion
Alternative 3: A 1-pie model, such as the suite of elements and options in the modified voluntary coop proposal
Alternative 4: No fishing
The AP strongly supports the inclusion of mitigation measures within analysis of each alternative. If required by NOAA GC, the no fishing alternative should be labeled as a mitigation alternative, recognizing it is analyzed primarily for contrast purposes.
Motion passed 16/0

AP Motion – October 2002 meeting:

C-1 (d) Bering Sea Crab EIS
The AP requests the Council add the following options to the EIS:

Option 1: add analysis of different ratios of “A” and “B” shares
   a. 80/20
   b. 70/30
   c. 60/40
   d. 50/50

Option 2: add analysis of a new option for processor quota – Processor Aggregate Quota.
The qualification rules for processors remain the same, as do all other particulars of the program except the portion of quota allocated to qualified processors (90%, 80%, etc) is allocated to the class of qualified processors, not as individual transferable quota.
“Processor qualification” may be transferred and consolidated with new suboptions describing the limitations on this activity.
   Suboption 1) Stacking. No more than
      A. 2
      B. 3
      Processor Qualifications may be stacked
   Suboption 2) caps.
      A. The present AFA caps on processing of crab shall apply
      B. The AFA caps on processing of crab will be removed.

AP Motion – December 2002 meeting:

C-1 CRAB MANAGEMENT
Community Protection:
The AP recommends that under the community protection provisions, an option to be added designating Kodiak as an “open port,” that is, Bering Sea crab delivered to Kodiak would be exempt from processor and/or regionalization limitations. Motion passed 14-6

C-1 (b) Crab EIS
The AP recommends the following alternatives be included in the Crab EIS:

1. A one pie system using the same qualifying years, transferability, use and coop provisions as the preferred alternative, integrated with the regionalization, skipper sharers and binding arbitration process.

2. A one pie system as above, with the addition of:
   A. a closed class license for processors using the qualifying years in the preferred alternative. (Option 2 from the October 2002 AP minutes).
B. Coop formation with the processor to which the vessel delivered the majority of their crab harvest in the year prior to implementation.
C. A 10%, one year penalty provision for movement between coops without the agreement of both coops.
3. Finally, the AP recommends dropping the current no fishing EIS alternative as it does not meet the reasonable standard described in the NMFS' letter. *Motion passed 16/5*
Comments on EIS Alternatives and Analysis
(Originally submitted at October 2002 meeting)

June in Dutch Harbour was a “dress rehearsal.” Certainly the 11-0 vote is indicative of a strongly held preference, and as human beings with free will we are all entitled to our preferences and prejudices. However, as Council members in a federal process under NEPA you are also required to set those aside when making a final decision based upon the record and the analysis in the EIS and RIR.

Some have suggested that the identification of a preferred option means that when you make the real decision in the future that the only options available will be those specifically identified in the EIS, and that (with the exception of the preferred option) the options identified in the RIR will be somehow buried away in Al Gore’s “Lockbox.”

Are There Adequate Alternatives in the EIS?

The Council identified three EIS options identified in Dutch:
- Economic Annihilation of Harvesters, Processors, and Communities (No Fishing)
- Continued slaughter of an average of 6 crabbers per year (Status Quo)
- "Three-pie" government sponsored market segmentation

None of these are viable alternatives. Though the last of the three contains many worthwhile features, it remains illegal.

I believe that NEPA requires at least one alternative that is both legal and viable be included in the analysis. Given that there is no longer a moratorium on a one-pie system, an IFQ based alternative should be included as an option. The simplest way to get there is to acknowledge that the alternatives analyzed in the RIR are not in a “lock box” but remain before the Council.

The EIS would also benefit from the inclusion of the alternatives identified in the AP motion.

Enhanced Analysis of B Share Performance in Preferred Option

The question of whether 10% B shares will fulfill the purposes for which they were included in the Council’s preferred option deserves more analysis in the EIS and RIR for the final decision, than has been provided to date.

The State of Alaska’s Issue Paper has said that 'B' shares will
- Protect harvester’s bargaining power and guarantee a fair price for all crab deliveries.
- Provide a pool of product for new processors to enter the fishery.
- Increase the share of communities which have limited qualified 'A' share processors.

The function of an EIS and RIR is to evaluate such assertions by examining contrasting alternatives, so that decisions rely on analysis rather than unsupported assertions.

In order for the above assertions to be possible, it must be plausible that being a non-PQ endowed processor is a viable business. This raises the threshold question: “How does a non-PQ endowed processor attract B share deliveries?”

Assume a base ex-vessel price of $1/lb in the PQ sector.
Assume a Processor 1 is PQ endowed with 1,000,000 lbs and takes A share deliveries from 10 vessels with 100,000 lbs each.
Assume Processor 2, not PQ endowed needs 100,000 lbs to justify operating a crab line.

In order to attract deliveries from 10 vessels with 10,000 lb each of B share crab Processor 2 will have to pay some sort of incentive bonus. If Processor 2 determines it can pay $1.10 (a 10 cent "competitive bonus") and still show a profit, will doing so attract deliveries of B shares?

In order to retain the deliveries of the 100,000 lbs of B share crab from its 10 vessels Processor 1 will have to pay some sort of "loyalty bonus." If Processor 1 determines it is willing to pay $1.01 (a 1 cent "loyalty bonus") pro-rated over both A and B deliveries, why would the vessels deliver B shares to Processor 2?

Both Processor 1 and 2 are paying an 'extra' $10,000 to get the B share deliveries. The difference is that Processor 1 is amortizing that $10,000 over 1,000,000 lbs and Processor 2 is amortizing over just 100,000 lbs. This gives the PQ endowed processor a 10:1 advantage over the non-PQ processor. (If B shares had been set at 20% the PQ endowed processor would still have a 5:1 advantage, or about a 3:1 advantage if B shares had been set at 30%)

This suggests that entry by a non endowed processor will not occur unless PQ endowed processors are indifferent to retaining B share deliveries. This in turn suggests that none of the three functions that B shares are supposed to perform will actually be achieved. If there are no non-endowed B share processors, they can't fulfill the functions asserted in the "Issue Papers."

Enhanced Analysis of IPQ

One of the purposes of IPQs is to address the transitional costs associated with non-malleable capital in the processing sector. The analysis currently lacks any quantitative analysis of the crab specific fixed capital (malleable or otherwise) in the processing sector.

If analysis shows that there is 10 cents on the dollar of bargaining power at stake in the choice between PQs at levels between 0% to 100%, that difference represents a difference of $10-50 million per year in ex-vessel revenue. The analysis should include an evaluation of the level and duration of the IPQ necessary to compensate the transitional costs of the processing sector.

Conclusion

The real and final decision on crab rationalization must be based on analysis not assertions, and that analysis requires inclusion of contrasting viable alternatives in the EIS.

dave fraser
FV Muir Milach
December 2, 2002

CRAB Group: A/P and SSC testimony,

Summary: The NPFMC Preferred Alternative, according to most proponents, provides community protection through processing quota [PQ] allocations and certain provisions relating to PQ. As the program begins to actually articulate in the trailing amendments, it is evident that this is not true. PQ allocation creates a portable ‘right’ which not only destroys the harvester’s rights in the market place, it also overturns local self-determination in that it makes the potential for local economic activity hostage to this new, portable ‘right to process.’ Suggestions are included to help correct this.

Section 3.6.2.2, Waiver of Sea-Time Requirement for Communities.
Comment on page 3: “The provision is unlikely to protect communities with historic processing history from departure of processing from the community. If a substantial share of the fishery is required to be delivered to a processor holding IPQs, ownership of harvest shares might have little effect on whether harvests from those shares are landed ion a community.”
IFQ holders are actually powerless to determine who buys their catch, under the NPFMC ‘preferred alternative’ - ultimately, that is the decision of the PQ owner. This remains true whether the IFQ is owned by a fisherman, or an entire community.

Section 3.6.2.3, “First Right of Refusal.” Since the IFQ holder is powerless, the NPFMC plan provides a provision “[t]o allow communities to protect themselves from the economic consequences of the departure of processing activity from a community, Section 3.4 of the council motion includes the following community first right of refusal option…”

Section 3.4 of the June 10 motion (page 12) states: “Options for this trailing amendment are defined in the April 14, 2002 Council Motion plus the following options. . .
This is further qualified by the statement: “If an owner of IPQ decides to sell the IPQ, the right of first refusal to purchase the IPQ shall be granted to [community groups].”

Section 2.6 of the April Council motion [also referenced at pg. 260, section 3.4.2.5, of the NPFMC Analysis] states:
“Transferability of processing shares . . .
(b) IPQs may be used by any facility of the Eligible Processor (without transferring or leasing)”

All versions of the PQ plan allow leasing of PQ, without sale, and there is explicit permission for use of PQ at ‘any facility’ of the Eligible Processor without transfer or lease. Therefore, the opportunity represented by the right of first refusal - if communities can afford to purchase PQ, and if the priorities between qualified communities can be amicably settled - represents only a subset of the total opportunities for PQ to leave a community.
This provision, also, “is unlikely to protect communities with historic processing history from departure of processing from the community…”

Section 3.6.2.3, suggestion:
This is particularly the case, if the 'preferred alternative' should be implemented. The non-AFA crab processors would be permanently reduced to less than half of their former market share. This discussion cannot be completed without a thorough EIS, particularly including a cumulative effects analysis that quantifies the changes that have taken place in crab processing due to the AFA. During the October meeting, the NPFMC received a report from Bud Walsh, who said many interesting things, including "there are no conflicts in the MSFCMA and the other national laws, such as the MMPA, the ESA and NEPA. The troubles don't even start, if the process starts out right." Also during that meeting, NOAA GC told the NPFMC that there must be a legal option among the alternatives for analysis, no later than December. It is now December and there is presently NO legal option among the alternatives.

**Suggestion:** The option should be chosen in such a fashion that it provides the least disruption to the council preferred alternative possible. This is important so that differential impacts can be best assessed in the EIS process. The best manner to accomplish this is through amendment (through insertion of the italicized text and deletion of the strikeout portion) of the June 10 council motion, as follows:

**Section 2.3 Initial Allocation of Processing Quota Shares**

**Option 1.** Processing quota shares shall be initially *calculated, but not issued* to Eligible Processors

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**Section 2.4 Percentage of Season’s GHL or TAC for which IPOs are distributed:**

2.4.1 IPOs will be issued for a portion of the season’s GHL or TAC for each species to provide open delivery processing as a means to enhance price competition:

- **Option 3:** 90% of GHL (or TAC) would be issued as IPOs, the remaining 10% would be considered open delivery:

- **Option:** 0% (zero percent) of GHL (or TAC) would be issued as IPOs.

Two further substantial changes should be considered:

- **At Section 1.6.4 of the June motion, “Controls on vertical integration (ownership of harvester QS by processors): Option 2: A cap of 5%.”** Insert a further option for A cap of 10%.

  This will provide a mechanism to offset some asymmetry of impacts, if they should be found.

- **At Section 2.8 Other Optional Provisions:**

  The crab processing caps enacted by Section 211(c)(2)(A) of the AFA would be terminated

  The crab processing caps enacted by Section 211(c)(2)(A) of the AFA shall be re-examined and made effective

  There may be further grammatical changes necessitated, and staff should be provided with the discretion to accomplish these.

**Conclusion:**

This suggested analytical option has not been a popular idea with the NPFMC, and they may well choose to call it the "not-Preferred alternative" if they choose. The wisdom in this suggestion is, that it provides for a useful, legal option, from this point forward. The NPFMC can continue its work on the trailing amendment process, and await the decision of Congress. If Congress chooses to authorize the PQ, then the work will be well in hand, and the NPFMC may return to its preferred alternative of June 10 if it wishes. If Congress does not act to authorize PQ, it does not behoove the NPFMC to continue to advise for it - the NPFMC was asked to report, not to lobby Congress. The rationalization of the fisheries must proceed, and the groundwork will have been laid to examine the impacts of the program properly, and from a proper baseline. Thus, if there are significant and
Bering Sea Opilio Crab
Processor Share by Sector (incl. C/P)

92-00 Historic

Non-AFA (43.71%)
AFA (48.79%)
CDQ (7.50%)

2000 AFA cap

Non-AFA (38.71%)
AFA (53.79%)
CDQ (7.50%)

Initial PQ, est.

2002 AFA cap

Non-AFA (18.86%)
AFA (69.71%)
CDQ (11.43%)

Non-AFA (31.07%)
AFA (80.01%)
CDQ (8.93%)
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*These nine vessel Pacific cod harvest accounted for approximately 75% for the total opilio fleet.*