Comprehensive Socioeconomic and Economic Data Collection

North Pacific Fishery Management Council
October 2006

At its June 2006 meeting, the Council tasked staff to prepare this discussion paper concerning the development of a comprehensive program to collect economic data from all participants in the fisheries that are subject to Council management. The discussion paper overviews several issues the Council could consider in developing a comprehensive data collection program, including the rationale for the program, the scope of the data that could be collected, use of the data, process for collecting and handling the data, and proprietary nature of the data and the importance of confidentiality. Throughout the development of the program, the Council should reasonably balance the benefits and costs of the data collection program. Some aspects of data collection (such as a system of audits) can be quite costly to both industry and administrators. If critical to ensuring the data's integrity, such a system could be necessary. If carefully designed the audit costs could be reduced for both participants and administrators, while still ensuring data accuracy. Additionally, the program should be developed in a manner that avoids redundancy. Since fisheries revenue data are currently collected through other initiatives, such as fish ticket, weekly processing reports, and commercial operator annual reports, the Council should consider only minimal collection of revenue data, limiting the revenue data to that necessary to ensure accurate merging across data sources. Instead, the primary focus should be on the costs associated with fishery operations – of which we are largely ignorant. While economic data collection of this type is a costly undertaking for both administrators and fishery participants, the potential benefit of improved decision making in the management of these valuable resources should not be undervalued.

The rationale for developing a data collection program

The first task in developing a data collection program is to clearly identify its purpose. In the absence of a clearly articulated rationale, the program cannot be fashioned to ensure that the data serve their intended purposes. Generally, data collected could be used to assess the magnitude and distribution of economic impacts, benefits, and costs arising from the fisheries under Council management. Several more specific purposes could be served by the collection of economic data, which should guide program development more specifically. For example, if the primary objective of the program is to determine the impacts of fisheries on local economies, the collection of data could focus on the geographic distribution of employment and spending of participants. Two primary (and related) purposes could be served by economic data collection:

- Enable the estimation of the magnitude of economic impacts and net benefits of fisheries
- Enable the estimation of the distribution of net benefits from fisheries
- Enable the estimation of changes in economic performance (efficiency and/or profitability) arising from changes in fishery management

These three simple purposes likely justify any economic data collection program that could be adopted by the Council. The Council, however, should refine any purpose statement to provide a more precise statement of its purpose. This more refined definition of its purpose will guide the Council in defining its program.

In general, the Council must make tradeoffs in defining any data collection program. Greater detail can provide a greater understanding of both the magnitude and distribution of impacts and benefits. To benefit from this increased detail, however, requires increased administrative and analytical costs and is often viewed as more intrusive by industry. Limitations on the use and release of data can be implemented to protect confidentiality and increase the acceptability of the program to industry. The Council could consider including some of the following statements in a problem statement for this action:

In two recent rationalization actions (the crab rationalization program and Amendment 80), the Council has incorporated systems for the collection of economic data. These data collection programs are viewed as critical to aiding the Council in understanding the economic impacts and distribution of benefits and costs of management decisions in these fisheries (including the rationalization programs). Improved data will ensure that decisions of the Council ***fairly and equitably assign fishing privileges and prevent the acquisition of excessive shares, improve efficiency in the utilization of fishing resources, minimize costs and avoid unnecessary duplication, and provide for sustained participation by fishing communities and minimize adverse impacts (modify as appropriate).***

An economic and socioeconomic data collection program that collects ownership, cost, revenue, and employment data on a periodic basis will allow a more complete understanding of the social and economic impacts of past and future Council actions to ensure that actions serve their intended purposes and meet the Council management goals. Data will be used by Council and agency staff, recognizing that confidentiality is of extreme importance.

Ownership data can be used both to monitor limits on holdings of licenses and fishing privileges and to assess the distribution of benefits from fisheries. Revenue and cost data by vessel and sector are essential to estimate fishery benefits and changes in efficiencies. Employment and crew data are needed to assess the distribution of benefits and impacts of actions. Some data, including ownership and employment data, may include demographic data, which will be used to assess distribution (including the geographic distribution) of impacts and benefits.

Rationale, similar to that above, has been applied by the Council in the development of the two economic data collection programs it has authorized, both of which were prompted by major changes in regulatory structure. However, the need for data to support rigorous economic analysis is ongoing and pervasive in fisheries management, and is not limited to cases of major structural changes. Comprehensive data collection across all regulated fisheries, not restricted to individual fleets, is needed to address the economic effects of management and regulatory changes at all scales. In addition, the most difficult and costly element of economic data collection has been historical reporting, which has required participants to recover and report cost and earnings data from prior years, oftentimes at considerable expense. Because regulatory and management changes must often be made in a relatively short time span, it is often impossible to implement economic monitoring in time to provide a record of baseline conditions. Thus, implementing data collection across all regulated fisheries is the only reliable method of providing a record of baseline economic conditions without requiring collection of historical data.

Existing Economic Data Collection Programs

The Council has passed programs to collect economic data in the two fisheries that it manages, the Bering Sea and Aleutian Islands crab fisheries and the Bering Sea groundfish fisheries prosecuted by non-AFA trawl catcher processors (the Amendment 80 program). Both data programs were adopted as a part of a rationalization package, with a stated purpose of assessing whether the applicable rationalization program has its intended effects. The scope of the surveys and the data collection programs differ substantially. Copies of the surveys are attached as Appendices 1A (crab catcher vessel), 1B (crab catch processor survey) and 2 (Amendment 80).[1]

Both programs fully survey all participants in applicable fishery annually. The crab program includes all catcher vessels, catcher processors, floating processors, and shore-based processors active in the fisheries. The Amendment 80 program collects data from all vessels participating in those fisheries.

[1] The survey for Amendment 80 catcher processors is in the process of being finalized and may vary slightly from that attached.

The more extensive of the two, the crab data collection program, included both the collection of historic data and annual data. The Amendment 80 program collects only annual data. The Council elected not to include the collection of historic data in that program, based on advice from NOAA General Counsel suggesting that the authority to collect historic data is limited. The authority for the collection of this data under the crab program is clear, given the specific legislative authority for that program.

Both programs attempt to collect comprehensive cost data. The focuses of the two programs, however, differ slightly. The crab program distinguishes crab specific costs from more general costs. For all vessels (including floating processors), that program distinguishes crab specific vessel costs (such as insurance, fuel, bait, and other costs specifically related to crab activity) and general vessel costs (such as capital expenditures and repairs and maintenance) that are not specifically related to crab activity. Shore-based processors are required to submit only crab specific costs. Costs unrelated to crab are not submitted by any participants. The Amendment 80 program collects annual costs for a participating vessel without distinguishing costs related to fisheries governed by the Amendment 80 cooperative program. In general, aggregation of data (including collecting annual data, as opposed to trip level data) complicates and limits the analytical uses that can be made of the data. The failure to distinguish costs related to the Amendment 80 fisheries will complicate analysis of the effects of that program. The data will be useful for examining overall activities of this fleet, which are greatly influenced by the Amendment 80 allocations and cooperative program. Submissions of more specific data, however, are more costly for both the submitter and the collector. In any program a tradeoff must be made between the analytical benefits of more specific data and the costs of submission, collection, and management of those data.[2]

A system for ensuring compliance with data submission requirements and verification of data are necessary for any data collection program to provide reliable data for analyses. To ensure minimal compliance, both programs require submission of the data survey form and a signed certification for receipt of annual permits. Both programs will also use similar systems of audits for data verification. The audit systems will include both targeted audits and random audits. Targeted audits occur after identification of unexplainable outliers in data submissions. Data submissions will be reviewed annually to identify outliers. If outliers are discovered, the submitter will be contacted to confirm and explain the submission. If the submission is confirmed and cannot be explained, an audit may be conducted to verify the submission. Random audits will also be used to periodically verify data submissions. Throughout the audit processes submitters will be permitted to correct submission errors, if those errors are believed to be unintentional. The goal of these systems is to ensure data accuracy with minimal need for enforcement actions and without overburdening industry for unintentional errors.

A system for electronic data collection is under development for both the Amendment 80 and BSAI crab economic data programs. The system is being designed as a modular system to permit additional modules as economic data collection expands to other fisheries. Electronic data collection would further improve the efficiency of data verification, both by streamlining the data entry process and permitting the development of internal consistency checks within the database, which would provide error checks during the submission of the data report by participants.

It should be noted that the aforementioned programs focus extensively on costs, as opposed to revenues, because existing data collection sources (primarily fish tickets, COAR, and weekly production reports) neglect costs altogether. Similarly, future data collection initiatives should focus on the operating costs in order to avoid redundant reporting of sources of revenue. It is this lack of cost data that most directly limits the ability of analysts to calculate net benefits derived from fisheries and utilize many of the economic models available for quantitative analyses of fisheries management actions.

[2] This trade off could also consider the intrusiveness of more detailed submissions. More aggregated data could be viewed as less intrusive and less likely to reveal data that could be considered confidential by some.

Persons included in data collection

Among the first issues to be resolved once the Council considers development of a data collection program is defining the pool of persons required to submit data. As with other aspects of the program, the pool of persons required to submit data should be developed based on the Council's purpose.

The Council should consider whether to include all fisheries (i.e., all groundfish and scallop fisheries) in the program or only a subset of the fisheries under Council management. One rationale for undertaking this action was that currently only a few fisheries are subject to data collection. Participants in these fisheries believe that they have been unfairly singled out and burdened by the data collection programs. Aside from the equity considerations, inclusion of all fisheries in the program could provide improved information, simplify administration and

If the Council intends to improve its understanding of fisheries economic impacts and benefits through primary processing, data should be required of both harvesters and processors. Inclusion of the processing sector in the program should also facilitate some comparison of the offshore and shore-based sectors of the fisheries. Including shore-based processing in the program will provide improved understanding of impacts on remote Alaska communities in which fishing is one of the only industries. Currently, the Magnuson Stevens Act prohibits the collection of economic data from shore-based processors. Some drafts of the reauthorization would allow collection of data from processors. The inclusion of processors in the program could be considered pending passage of the reauthorization, realizing that permission for their inclusion would be required.

Assuming the Council intends to collect data from harvesters and processors, the Council will need to determine the specific sector members required to submit data. The Council could elect to require vessel and facility operators to submit data or persons holding permits (such as license and permit holders, and IFQ holders). Generally, the person with the best access to the data of interest should make the submission. Persons actively participating in the fisheries (i.e., vessel owners and plant owners) are most likely best situated to provide most of the data of interest. Operators will have most of the expenditure information of interest, including employment and crew payment data, and equipment expenditures.

The Council could also include permit holders (such as IFQ holders or AFA vessel owners) that did not operate a vessel in the survey. Inclusion of these persons could be redundant, but could be useful to verify information submitted by vessel operators who leased shares. Similarly, persons who do not actively engage in processing, but employ the services of others for custom processing, could be included in surveys to verify information from plants that custom process on their behalf.

The Council should also consider whether all people covered by the data collection program should be required to submit data for every period covered. Requiring only a sample of people to respond during each survey period can reduce costs and burden to the industry. Effective sampling, however, can be complicated to administer and may be viewed as unfair. It is important that a sample be representative of the population from which it is drawn. In the case of fisheries with few participants (such as small trawl fisheries and non-cod fixed gear fisheries), a representative sample may require most participants to submit annual surveys. In addition, changes in participation from year-to-year could complicate efforts to maintain a representative sample. Requiring all participants to submit surveys responses could simplify administration of the program and might be viewed as a more equitable approach. Lastly, requiring submissions from all participants could lead to more accurate data in the long run. Requiring frequent submissions will result in submitters being more familiar and practiced in compiling data and completing the surveys and will provide additional opportunity for the collector to identify and work to correct inaccuracies.

Period covered by and frequency of any survey

A few issues should be considered concerning the frequency and period covered by data submissions.

The time period covered by data submissions (and whether the survey should require historic data) should be considered. The crab program required the submission of historic data. In development of the data collection

for Amendment 80, however, NOAA General Counsel expressed concern that the collection of historic (or retrospective) data could beyond the authority of the Council. The rationale for this concern is that prior notice would be lacking for assembling historic data. The absence of historic data is problematic when implementing a data collection program to assess impacts of a simultaneous action, since baseline data would be unavailable. In the case of the independent development of a general data program, the collection of historic data is less important. The data will generally be used to assess fishery and management action economic impacts and effects. Historic data could be desirable for assessing the effects of past actions and could provide an extended period of data sooner, making the data more useful in the near term.

Additionally, the Council will need to consider the period covered by data submissions. In both the crab program and Amendment 80, data submissions are annual. Annual submissions could be favored as a means of reducing the burden, while retaining a reasonable periodicity for submissions. In addition, most other data available concerning fisheries are available and usually categorized on an annual basis. The collection of this economic data on an annual basis would likely simplify consolidation of the data with other submissions.

Along with the time period for submission of data, the Council will need to consider the periodicity of the data itself. Even if the Council elects for annual submissions of data, it could use a different time basis for the data, such as quarterly, or even trip or transaction. One advantage to quarterly data is that seasonal differences could be considered in analyses. For example, seasonal changes in the presence of roe and fish quality or catch rates likely explain differences in fishing effort. These differences could be explored more completely, if seasonal (rather than annual) data are submitted. In addition, many other monitoring programs collect data at a higher temporal resolution, such as the weekly and trip level landings and revenue data collected through fish tickets and weekly processor reports. Matching the resolution of economic data to other data sources with which they would be combined in analysis would allow most efficient use of existing data. Frequency of data, however, may substantially affect the burden of the data collection program to both industry and administrators.

Information included in the survey

Fishing revenues. Currently, the agency and analysts have reasonable sources of data for most sources of revenues. Collection of revenue data from fishing as apart of this action could be in the aggregate and would be used primarily for verification purposes and to assist analysts in combining data from various sources.

Revenues from sale of fishing privileges. Data showing revenues from trade of fishing privileges and licenses could be collected to fill gaps in the current data. These data are not comprehensively collected and would substantially aid analysts in understanding the production value of fisheries and the value of fishing privileges.

Ownership. In most fisheries, only data showing direct ownership are available. Given the corporate structures used to hold many fishery assets, these data are inadequate for assessing the consolidation of interests and activity in the fisheries. The collection of detailed ownership information as a part of this action would facilitate a better understanding of the level of consolidation in the industry and the distribution of benefits among fisheries participants.

Employment. Little employment data are available for fishing vessels. The absence of crew data prevents any comprehensive understanding of fisheries employment and compensation and the distribution of benefits to crew. In additional, the geographic distribution of impacts are not well understood, to the extent those impacts are derived through crew.

Costs. Cost data are largely unavailable for analyzing fishery benefits and impacts. The absence of these data prevents any quantitative assessment of the net benefits of fisheries to producers or the understanding of changes in production efficiencies under different management measures. Additionally, the distribution of benefits between the two major sectors (harvesters and processors) under different management structures cannot be well understood in the absence of these data.

Expenditures by location. Currently, little direct information concerning spending by location are available for the different fishery participants. These data are useful for examining the geographic distribution of impacts of actions. Neither the crab program nor the Amendment 80 data collection program collect these data. The added costs and complexity of submission, collection, and analysis of these data likely deterred the Council from including their collection in other actions.

Variation across sectors. Since data are likely to be collected from several different types of operations, data provision will need to differ across operations. Catcher vessel data will relate only to vessel and fishing activity and harvesting crew information, including some gear specific information, which is expected to vary somewhat across gear types. Catcher processors data will relate to the vessel and harvesting and processing. Information could vary somewhat across both gear types and production types.

Uses of collected data

The introduction of a broad-based economic data collection program in the North Pacific fisheries has the potential to greatly expand the information available to the Council for understanding the economic impacts of its management decisions. Quantitative economic analyses are currently often limited to estimates of catch and revenue. While these are important contributors to the economic health of a fishery, a more fundamental concern is the economic efficiency of operations and whether a particular management decision or program threatens the economic viability of one or more sectors. In the absence of more detailed cost information, estimation of efficiency or economic health is not possible. Instead, analysts are left to rely on revenue data and inference for assessing the economic health of fishery participants. While these qualitative discussions can provide insight into the effects of actions, the more complete understanding of actions that could be derived using quantitative estimates is not possible.

In the current environment, the Council is faced not only with a limited understanding of economic conditions that could arise under proposed actions, but also a limited understanding of the existing economic conditions in its fisheries. A more in-depth understanding of the existing conditions is important to the Council's prioritization of actions and to assess the urgency with which it should operate. Existing conditions also are the foundation for understanding the potential impacts of an action.

Depending on the level of detail of data submitted, the Council could also use the data collection program to improve its understanding of the geographical distribution of impacts of its actions. Currently, geographic expenditure data from vessels in the various Council managed fisheries are unavailable. As with other aspects of analyses, these values cannot be quantified in current analyses. Analysts instead use other available data sources, such as municipal revenue data and tax data to surmise spending patterns. Improved expenditure data could substantially improve the Council's understanding of the impact of its fisheries on communities.

Perhaps most important, improved data are critical to the Council satisfying the regulatory requirement to analyze actions. Analyses are required to identify the likely attributable economic and welfare outcomes. Specifically, Executive Order 12866, under which the requirement to prepare a Regulatory Impact Review (RIR) arises, states:

> In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider. Further, in choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including potential economic, environment, pubic health and safety, and other advantages; distributive impacts; and equity) unless a statute requires another regulatory approach.

The executive order shows a strong preference for the inclusion of any possible quantitative estimates over less precise qualitative estimates. Many of the analyses prepared for the Council cannot begin to quantify net

benefits due to the unavailability of cost data. Distributive impacts are also important component of any RIR. An understanding of the distribution of impacts of actions is often limited by the availability of detailed cost data.

The Regulatory Flexibility Act requires analysts to quantify the effects of actions on 'small entities'. Current analyses suffer in two respects. First, ownership data are often limited for identifying small entities. Small fishing entities are defined using revenue thresholds. Often revenue data are available on a vessels basis, but determining whether entity level thresholds are met requires combining data from commonly owned vessels. More complete ownership data could prove useful to these analyses. Second, without cost data analysts are unable to quantify the net benefits of actions to small entities. Not only are data unavailable for assessing net benefits in general, but specifically the any disproportionate impact of actions on small entities is unavailable. The lack of appreciation of the differences of effects across different size entities has frustrated analysts and some participants in the process.

Appendices 3 and 4 contain more technical descriptions of some of the uses that could be made of the various data proposed to be collected under this action.

Confidentiality

Maintaining confidentiality of sensitive proprietary data is critical to the success of the data collection program. Since the data will be collected under the authority of the MSA, the substantial protections provided by the Act will be maintained for all data.

To protect the industry, before data are collected regulations must be established that protect the data from being released for reasons other than the purposes for which it was collected. Some members of the fishing industry have stated that in the past data have been provided to agencies on a voluntary basis. Those data were then forced to be released through court proceedings and used in lawsuits against the companies that provided the data. Because of such incidents, it is imperative that regulations preclude the data from being used by individuals that are not intended to have access to the data. Authorized agency staff from NMFS, ADF&G, and NPFMC are currently defined as the primary users of these data. Other users would include individuals that are contractors of the above agencies that are conducting research associated with the fisheries. AKFIN or PSMFC that are involved in maintaining and supplying data to other agencies. University faculty conducting research for one of the above agencies would also be envisioned as users that would be given access to these data. The release of these data outside of the primary users or for other purposes would be strictly regulated. Any third party contractor would be subject to the same confidentiality restrictions on the release and use of data as apply to primary users. Third party contractors are also typically required to return all data at the conclusion of the contract under which the data are released. NMFS has stated that protecting the confidentiality of the data will be one of its highest priorities.

Data verification

Any analysis is only as reliable as its underlying data. Analysis of data collected as a part of this program will be useful for assessing the management changes of the program, only if the data are accurate. Regulations will be developed to ensure the accuracy of data provided. In past programs two systems of verification have been considered: audit processes and submission of independently audited financial statements. The audit process has been favored over submission of financial statements because it is likely to be less burdensome and intrusive, and more focused on the data that are collected. Annual submissions of audited financial statements or tax returns are likely to involve company information beyond the scope of data submitted, complicating and reducing their utility for data verification. In addition, financial statements could be revealing of aspects of a company that are beyond the purpose of the data collection. An audit process would be more informative since it would be focused on the data submitted and could be accomplished in a manner that is less intrusive and burdensome.

The audit systems included in other programs involve a combination of random and non-random audits. Non-random audits are undertaken after examining data for unexplainable outliers. Random audits are undertaken periodically for some portion of the data submitters. Industry members are provided an opportunity to correct data submissions, if errors are deemed to be unintentional. The goal is create an incentive to supply accurate data while minimizing the burden on industry and the need for enforcement actions. Providing an opportunity to correct unintentional erroneous submissions is considered important because of the complexities associated with generating these data and the potential for unintended errors.

Enforcement

Enforcement could occur at a few different stages in a data collection program. Failure to submit completed forms must be addressed. In both of the existing data programs issuance of annual permits are contingent upon the applicant's submission of the required economic data survey. If an applicant has failed to submit an economic data survey to NMFS, the application for an annual permit would be considered incomplete by NMFS and the applicant would not receive an annual permit. Until all requirements of the annual permit application are satisfied, including the submission of a economic data survey, the person would not receive an annual permit. If a person is required to submit an economic data survey and does not apply or re-apply for an annual permit, or provides fraudulent information, then NMFS Enforcement would be asked to proceed with a standard enforcement action. Enforcement would then use their discretion regarding the best method to achieve compliance. Those methods could include fines, permit sanctions, or criminal prosecution.

It is important to distinguish between an economic data survey that is "complete" versus one that is "accurate." A complete economic data survey is one that has information in all required information fields. As long as the survey is complete, NMFS would issue an annual permit because the submitter would have compiled with the regulatory requirement to submit a complete economic data survey. Once NMFS has determined that the economic data survey is complete, NMFS would then determine whether the submitted information appears to be accurate.

Under the existing data collection programs, completed surveys are subject to verification through non-random and random audit processes. Non-random audits may be initiated when potential errors in the data are detected and the submitter is unable to submit additional data that adequately responds to identified concerns. A random audit would be initiated by NMFS to spot check the accuracy of information provided by the economic data surveys. A sampling methodology would be developed by NMFS to select those economic data surveys to be audited in a random audit process. Enforcement actions could be initiated based on the failure to reconcile data during the audit process. The objective of the audit process is not to be punitive; the demands of the process and the enforcement sanctions would be the minimized, subject to the need to maintain data integrity and accuracy.

Development of the data collection program

Committees and industry workshops have been used to develop the existing data collection programs. These less formal means of interaction can serve a useful role in the development of the program since they allow a thorough exchange of detailed information and ideas not possible in other fora. As the Council proceeds with the development of a data collection program, the use of both the formal Council process together with these less formal interactions between industry and agency and Council staff may be useful. The Council does not need to specifically define all aspects of the program, but will need to provide sufficient detail to express its intent and to ensure that its intent is carried out. Staff interaction with industry can be used to ensure that surveys ask appropriate questions and derive useful information.

Conclusion

The data collection program considered under this action has the potential to fill a void in data that analysts and managers have struggled with for some time. The regulatory analyses required for fisheries actions

typically lack quantitative net benefit analyses due to the unavailability of cost information. In addition, our understanding of distributional impacts of actions often suffers because of these data shortfalls. Although the collection of data is a costly enterprise, the development of a single comprehensive program, applicable to most (if not all fleets) has the potential to reduce costs for both participants and administrators. In addition, the benefit of improved management should not be overlooked in considering whether to undertake this effort. The collection of these data has the potential to improve the ability of the Council to manage its fisheries to achieve the greatest benefits and equitably distribute those benefits.

Revised: 3/30/2006

OMB control No. 0648-0518
Expiration Date: 02/29/2008

ANNUAL
CATCHER VESSEL
CRAB ECONOMIC DATA REPORT (EDR)

CALENDAR YEAR 2005

This form can be downloaded from
http://www.fakr.noaa.gov

PUBLIC REPORTING BURDEN STATEMENT

Public reporting burden for this collection of information is estimated to average 7.5 hours per response, including time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden to Assistant Regional Administrator, Sustainable Fisheries Division, NOAA National Marine Fisheries Service, P.O. Box 21668, Juneau, AK 99802-1668.

ADDITIONAL INFORMATION

Before completing this form, please note the following: 1) Notwithstanding any other provision of law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number; 2) This information is mandatory and is required to manage commercial fishing efforts for crab under 50 CFR part 680 and under section 402(a) of the Magnuson-Stevens Act (16 U.S.C. 1801, *et seq*.); 3) Responses to this information request are confidential under section 402(b) of the Magnuson-Stevens Act (16 U.S.C. 1801, *et seq*.). They are also confidential under NOAA Administrative Order 216-100, which sets forth procedures to protect confidentiality of fishery statistics.

ANNUAL CATCHER VESSEL EDR

Introduction

This report collects information on Bering Sea and Aleutian Islands Management Area (BSAI) crab operations, including Western Alaska Community Development Quota Program (CDQ) crab fisheries. These fisheries are referred to as crab rationalization fisheries (CR fisheries). Pursuant to the legislation, the data and identifiers will also be used for program enforcement and determination of qualification for quota shares. Consequently, identifiers and data will be disclosed to NOAA Enforcement, NOAA General Counsel, the Antitrust Division of the Department of Justice, the Federal Trade Commission, and NOAA Restricted Access Management Program.

You have received this form because our records show that you are either the owner of a catcher vessel that participated in the BSAI crab fisheries in the past or were leased a catcher vessel that participated in the BSAI crab fisheries in the past. **You are required to submit the Certification Pages (pages 5 and 6) and any additional information requested in the Economic Data Report (EDR). Failure to submit an EDR form when required will result in delay in and/or acceptance of any and all crab permit applications**.

To make sure that each company is consistently and accurately completing the EDR, random audits will be performed by a qualified accountant on some of the EDRs for a subset of the crab fishery participants. This step will ensure that the data can be relied upon to produce accurate and reliable information for the Alaska crab fisheries.

Auditors will verify records by comparing specific elements of the report with your accounting records. To make this activity as efficient and non-intrusive as possible, we suggest that you:

1. Keep a copy of the completed EDR or certification pages you submit to the Data Collection Agent (DCA). Copy and attach extra sheets as needed.

2. Keep a file that has all of the supporting information used in the preparation of the EDR.

3. Make sure that the EDR agrees to the company's highest level of financial information. For this purpose, the highest level of financial information is defined in order as:

    a. Audited financial statements
    b. Reviewed financial statements
    c. Compiled financial statements
    d. Tax returns.

Record only whole numbers. Round up dollar figures to the next highest dollar.

If YOUR label address is incorrect or missing, please correct the error on the label or print your permanent name and address here.

Vessel Name
Company Name
Street address or P.O. Box Number
City, State, and Zip Code

NOTE:

Any owner or leaseholder of a catcher vessel during any period in the calendar year identified on the EDR in which the catcher vessel was used to harvest crab in a Crab Rationalization (CR) fishery must submit to the DCA, at the address provided on the form, an EDR for a catcher vessel.

Definition of "Leaseholder": For the purpose of defining the persons responsible for submitting the EDR, a Leaseholder is a person, other than the owner of the catcher vessel for which the EDR is required, who: was identified as the leaseholder, in a written lease, of the catcher vessel, **OR** paid expenses of the catcher vessel, **OR** claimed expenses for the catcher vessel as a business expense on schedule C of his/her Federal Income Tax Return, or on a State Income Tax Return.

Mail or FAX Certification Pages or Entire EDR by June 28, 2006 to:

Pacific States Marine Fisheries Commission
205 SE Spokane, Suite 100
Portland, OR 97202

FAX Number: 503-595-3450

For more information or if you have questions,
please call toll free 1-877-741-8913

This page intentionally blank.

CERTIFICATION PAGE – 1 of 3

This is a **required form**. Provide all information requested below.

Catcher Vessel Information	
Vessel Name	ADF&G Vessel Registration Number
	Crab License Limitation Permit Number(s)
	USCG Documentation Number
Current Estimated Market Value of Vessel and Equipment ($)	Replacement Value of Vessel and Equipment ($)
Name of Crab Harvesting Cooperative (if applicable)	

Owner Information	
Name of company, partnership, or sole proprietorship	
Business Telephone Number	Business FAX Number
Business E-mail address, if available	

Leaseholder Information (if applicable)	
Name of company, partnership, or sole proprietorship	
Business Telephone Number	Business FAX Number
Business E-mail address, if available	

NOTE: Any owner or leaseholder may appoint a designated representative to respond to questions in the EDR. The designated representative is the primary contact person for the DCA on issues relating to data required in the EDR.

Person Completing this Report (check one)

❒ Owner (If your name and address are the same name and address provided in the Owner Information block above, the information does not need to be repeated here)

❒ Leaseholder (If your name and address are the same name and address provided in the Leaseholder Information block above, the information does not need to be repeated here)

❒ Designated Representative (complete information below)

Name	Title
Business Number Telephone	Business FAX Number
Business E-mail address (if available)	

CERTIFICATION PAGE – 2 of 3

Select one of the following statements and provide any requested information. Check one box below.

<table>
<tr><td colspan="2">❒ 1. You are the catcher vessel owner, you harvested BSAI crab in the above described vessel during the 2005 calendar year.
Complete and submit Entire EDR for the 2005 calendar year.</td></tr>
<tr><td colspan="2">❒ 2. You are the catcher vessel leaseholder, you harvested BSAI crab in the above described vessel during the 2005 calendar year.
Complete and submit Entire EDR for the 2005 calendar year.</td></tr>
<tr><td rowspan="4">❒ 3. You are the catcher vessel owner, and you leased the above described vessel for a portion of the year to another party, and harvested some BSAI crab in the above described catcher vessel during the 2005 calendar year.

Provide the name, address, and telephone number of the person to whom you leased the vessel during the 2005 calendar year.

Complete and submit Entire EDR for the 2005 calendar year.</td><td>Leaseholder Name</td></tr>
<tr><td>Street address or P.O. Box</td></tr>
<tr><td>City, State, and Zip Code</td></tr>
<tr><td>Telephone No. (include area code)</td></tr>
</table>

CERTIFICATION PAGE – 3 of 3

❒ 4. You are the catcher vessel **owner**, you leased or sold the above described vessel to another party, and harvested no BSAI crab in the above described vessel during the 2005 calendar year, Provide the name, address, and telephone number of the person to whom you leased or sold the vessel during the 2005 calendar year. **OR** You are the catcher vessel owner and vessel was lost or rendered permanently inoperable due to accident, and harvested no BSAI crab in the above described vessel during the 2005 calendar year, **Indicate status of vessel:** **❒ Leased ❒ Sold ❒ Lost** Complete and submit the **EDR Certification Pages only**.	Leaseholder Name Street address or P.O. Box City, State, and Zip Code Telephone No. (include area code)
❒ 5. You are the catcher vessel **owner**, and no one harvested BSAI crab in the above described catcher vessel during the 2005 calendar year. Complete and submit the **EDR Certification Pages only**.	

Sign and date the appropriate box below:

If you checked **Box 1, Box 2, or Box 3** above, **SUBMIT ENTIRE EDR INCLUDING CERTIFICATION PAGES. Sign in the space below.**	
I certify under penalty of perjury that I have reviewed all the information in this report and that it is true and complete to the best of my knowledge.	
Signature	Date signed

If you checked **Box 4 or Box 5** above, **DO NOT SUBMIT ENTIRE EDR – SUBMIT ONLY THE CERTIFICATION PAGES. Sign in the space below.**	
I certify under penalty of perjury that I do not meet any of the conditions required under statements 1, 2, or 3 above to submit an entire EDR.	
Signature	Date signed

This page intentionally blank.

Instructions for completing this EDR Form: Provide all information requested in each section. Please record only whole numbers, and round all dollar values to the next highest dollar.

The table below contains information you will need when completing the EDR forms.

Table: Crab CR Fisheries

Fishery Code	CR Fishery	Geographic Area
EAG	Eastern Aleutian Islands golden king crab (*Lithodes aequispinus)*	in waters of the EEZ with **an eastern boundary** the longitude of Scotch Cap Light (164° 44' W. long.) to 53E 30' N. lat., then West to 165E W. long. **a western boundary** of 174° W. long., and **a northern boundary** of a line from the latitude of Cape Sarichef (54° 36' N. lat.) westward to 171° W. long., then north to 55° 30' N. lat., then west to 174° W. long.
WAG	Western Aleutian Islands golden king crab (*Lithodes aequispinus*)	in waters of the EEZ with **an eastern boundary** the longitude 174° W. long., **a western boundary** the Maritime Boundary Agreement Line as that line is described in the text of and depicted in the annex to the Maritime Boundary Agreement between the United States and the Union of Soviet Socialist Republics signed in Washington, June 1, 1990, and as the Maritime Boundary Agreement Line as depicted on NOAA Chart No. 513 (6th edition, February 23, 1991) and NOAA Chart No. 514 (6th edition, February 16, 1991), and **a northern boundary** of a line from the latitude of 55E30' N. lat., then west to the U.S.-Russian Convention line of 1867.
BST	Bering Sea Tanner crab (*Chionoecetes bairdi)*	in waters of the EEZ east of the Maritime Boundary Agreement Line as that line is described in the text of and depicted in the annex to the Maritime Boundary Agreement between the United States and the Union of Soviet Socialist Republics signed in Washington, June 1, 1990, and as the Maritime Boundary Agreement Line as depicted on NOAA Chart No. 513 (6th edition, February 23, 1991) and NOAA Chart No. 514 (6th edition, February 16, 1991) to 171E W. long., and then south to 54E30'N. lat. with **a southern boundary** of 54° 36' N. lat.
BSS	Bering Sea Snow crab (*Chionoecetes opilio)*	in waters of the EEZ east of the Maritime Boundary Agreement Line as that line is described in the text of and depicted in the annex to the Maritime Boundary Agreement between the United States and the Union of Soviet Socialist Republics signed in Washington, June 1, 1990, and as the Maritime Boundary Agreement Line as depicted on NOAA Chart No. 513 (6th edition, February 23, 1991) and NOAA Chart No. 514 (6th edition, February 16, 1991) to 171E W. long., and then south to 54° 30' N. lat. with **a southern boundary** of 54° 36' N.
BBR	Bristol Bay red king crab (*Paralithodes camtschaticus*)	in waters of the EEZ with **a northern boundary** of 58° 30' N. lat., **a southern boundary** of 54° 36' N. lat., and **a western boundary** of 168° W. long. and including all waters of Bristol Bay.

1. BSAI Crab Activity Chart

CR Fishery Code

Record the following data items for each CR fishery in which this vessel participated. Leave the row blank for any fisheries in which the vessel did not participate.

ADF&G Fish Ticket Number

Record the ADF&G Fish Ticket numbers corresponding to the landings that occurred during each CR fishery.

Number of Days Fishing

Record the total number of days during each fishery that the vessel was operating in the fishing grounds. Do not include time spent waiting at processors or traveling to and from the fishing grounds.

Number of Days Traveling and Offloading

Record the total number of days during each fishery that the vessel spent traveling to and from fishing grounds and waiting to offload at processors.

Table 1.0: BSAI Crab Fishery Activity

CR FISHERY CODE	ADF&G FISH TICKET NUMBER(S)		NUMBER OF DAYS FISHING	NUMBER OF DAYS TRAVELING & OFFLOADING
EAG				
WAG				
BST				
BSS				
BBR				

2. Crab Sales, Gross Revenue

Pounds Sold
Record the total pounds of BSAI crab landed by this vessel, by CR fishery.

Gross Revenue
Record the gross revenue from crab sales. Include any post-season adjustments. Gross revenue includes the value of any withholding or deductions from your payment for bait or taxes. We will ask you to report taxes and bait costs separately in Section 5.

Deadloss
List the total deadloss for all crab landed by this vessel in each CR fishery, in pounds.

Table 2.0: Crab Sales, Gross Revenue

CR FISHERY CODE	CRAB SALES TO PROCESSORS		DEADLOSS
	Pounds Sold	Gross Revenue	
EAG	Lbs	$	Lbs
WAG	Lbs	$	Lbs
BST	Lbs	$	Lbs
BSS	Lbs	$	Lbs
BBR	Lbs	$	Lbs

3. BSAI Crab Quota

3.1 Catcher Vessel IFQ Allocation

Record information only for the annual allocation of IFQ to the catcher vessel owner or leaseholder submitting this EDR. Information on harvest quota allocated to other entities and harvested or processed by this vessel (CDQ, and IFQ from other quota holders) will be collected in Table 3.2.

CR Fishery Code
Record the following data items for each CR fishery in which this vessel participated. Leave the row blank for any fisheries in which the vessel did not participate.

CPO – IFQ Harvested: record the amount of this catcher vessel owner's (or leaseholder's) allocation of Catcher/Processor Owner (CPO) IFQ pounds harvested in the listed fishery.

IFQ A Harvested: record the amount of this catcher vessel owner's (or leaseholder's) allocation of IFQ A-class pounds harvested in the listed fishery.

IFQ B Harvested: record the amount of this catcher vessel owner's (or leaseholder's) allocation of IFQ B-class pounds harvested in the listed fishery.

CPO – IFQ Transferred

Pounds: Record the number of pounds of this vessel owner's (or leaseholder's) allocation of CPO-IFQ harvested by other vessels (either through formal lease or other agreement) in the listed fishery.

Revenue: Record total payment received from other vessels for use of the transferred CPO-IFQ pounds in the listed fishery.

IFQ A Transferred

Pounds: Record the number of pounds of this vessel owner's (or leaseholder's) allocation of IFQ-A harvested by other vessels (either through formal lease or other agreement) in the listed fishery.

Revenue: Record total payment received from other vessels for use of the transferred IFQ-A pounds in the listed fishery.

IFQ B Transferred

Pounds: Record the number of pounds of this vessel owner's (or leaseholder's) allocation of IFQ-B harvested by other vessels (either through formal lease or other agreement) in the listed fishery.

Revenue: Record total payment received from other vessels for use of the transferred IFQ-B pounds in the listed fishery.

Table 3.1: Vessel Owner's IFQ Allocation

CR FISHERY CODE	VESSEL IFQ ALLOCATION								
	CPO-IFQ Harvested (pounds)	IFQ A Harvested (pounds)	IFQ B Harvested (pounds)	CPO- IFQ Transferred		IFQ A Transferred		IFQ B Transferred	
				Pounds	Revenue	Pounds	Revenue	Pounds	Revenue
EAG									
WAG									
BST									
BSS									
BBR									

3. BSAI Crab Quota

3.2 BSAI Crab CDQ and IFQ Lease Costs

In the table below, please record the totals for CDQ and IFQ *owned by other entities* that were landed by this vessel in the listed BSAI Crab fisheries. Please include all quota landed, through either a formal lease or informal agreement (such as stacking or pooling within harvest cooperatives or harvest of IFQ held by crew).

If you had an arrangement under which you harvested another holder's quota and paid them a percentage (for example, 70%) of the revenues from the landed quota, record the total pounds landed and the total dollar amount of the landing revenues paid to the quota holders(s), for each type of quota (CDQ, IFQ-A, IFQ-B, IFQ- CP).

Report only the direct costs of acquiring CDQ or IFQ. Indirect costs (e.g., harvest cooperative fees) will be recorded in Section 6.1. If you did not acquire additional CDQ or IFQ for one or more fishery, indicate N/A on that line.

Adak WAG IFQ and Community Development Quota (CDQ):

Pounds : If you acquired the right to land a given amount of Adak IFQ (in the Western Aleutian Islands golden king crab fishery) or CDQ, for 2005, enter the number of pounds.
Total Cost: Record the total cost of the **Adak IFQ or CDQ** crab you acquired in each CR fishery for each species.

CPO-IFQ

Pounds: If you acquired the right to land additional **CPO-IFQ** crab for 2005 (beyond your original allocation), enter the number of pounds.

Total Cost: Record the total cost of the additional **CPO-IFQ** crab you acquired in each CR fishery for each species.

IFQ A

Pounds: If you acquired the right to land additional **IFQ A-class** crab for 2005 (beyond your original allocation), enter the number of pounds.
Total Cost: Record the total cost of the additional **IFQ A-class** crab you acquired in each CR fishery for each species.

IFQ B

Pounds: If you acquired the right to land additional **IFQ B-class** crab for 2005 (beyond your original allocation), enter the number of pounds.
Total Cost: Record the total cost of the additional **IFQ B-class** crab you acquired in each CR fishery for each species.

IFQ C – Captain:

Pounds: Record the number of pounds of **IFQ Crew ("C-class")** crab quota owned by the vessel captain and harvested by this vessel.
Total Cost: Enter the amount in dollars paid to the Captain for the IFQ. Do not include payments made to the captain for his labor - these will be reported in Section 4.

IFQ C – Crew:

Pounds: Record the number of pounds of **IFQ Crew ("C-class")** crab quota owned by the vessel crew (excluding the captain) and harvested by this vessel.
Total Cost: Enter the total amount in dollars paid to crew members for the IFQ. Do not include payments made to the crew for labor - these will be reported in Section 4.
Number of Crew: Record the number of crew members paid for contributing IFQ.

Table 3.2 BSAI Crab CDQ and IFQ Lease Costs

CR FISHERY CODE	CDQ/Adak IFQ		CPO-IFQ		IFQ A		IFQ B		IFQ C - CAPTAIN		IFQ C - CREW		
	Pounds	Total Cost	Pounds	Total Cost	Pounds	Total Cost	Pounds	Total Cost	Pounds	Total Cost	Pounds	Total Cost	Number of Crew
EAG													
WAG													
BST													
BSS													
BBR													

4. Labor Information

4.1 Crab Harvesting Labor Costs

Record the following information for each fishery in which the vessel participated. Leave the row blank for any fisheries in which the catcher/processor did not participate.

No. of Paid Crew Members (exclude the captain): Record the number of crew aboard the vessel (exclude captain).

Crew Labor Payment (exclude the captain)
Record the total payment made to crew (exclude the captain) for their crew services. List the amount actually paid to crew in their settlement, *not* their earnings before crew-related expenses (such as fuel, bait, or food and provisions) were deducted. Exclude any payments to crew for their IFQ (this should have been entered in Table 3.2).

Captain Labor Payment
Record the total payment made to the captain for his services. List the amount actually paid to the captain, *not* the earnings before shared expenses (such as fuel, bait, or food and provisions) were deducted. Exclude any payments to captain for his/her IFQ (this should have been entered in Table 3.2).

Table 4.1: Labor Payments to Captain and Crew

CR FISHERY CODE	CAPTAIN	CREW	
	Total Labor Payment to Captain	Number of Paid Crew Members on Vessel	Total Labor Payment to Crew
EAG	$		$
WAG	$		$
BST	$		$
BSS	$		$
BBR	$		$

4. Labor Information
4.2 Labor Payment Details

In Table 4.2 below, indicate by checking the appropriate column whether the following expenses were deducted (shared expenses taken off the top of gross revenues), directly charged (charged to an individual after the crew share is calculated), not charged to crew, or not applicable when calculating the crew payments in BSAI crab fisheries.

Table 4.2 Labor Payment Details

EXPENSES	CHECK ONE			
	DEDUCTED	DIRECTLY CHARGED	NOT CHARGED TO CREW	NOT APPLICABLE
Fuel and lubrication	❒	❒	❒	❒
Food and provisions	❒	❒	❒	❒
Bait	❒	❒	❒	❒
Fish tax (see Section 5.1.n)	❒	❒	❒	❒
Observer costs	❒	❒	❒	❒
CDQ costs (from Table 3.2)	❒	❒	❒	❒
IFQ costs (from Table 3.2)	❒	❒	❒	❒
Freight	❒	❒	❒	❒
Gear loss	❒	❒	❒	❒
Other (describe):	❒	❒	❒	❒
	❒	❒	❒	❒
	❒	❒	❒	❒

4. Labor Information

4.3 Revenue Shares

In Table 4.3, indicate what percentage of the net share (total revenues minus the expenses listed in Table 4.2) was paid to the boat, crew, and captain for each of the listed CR fisheries. If you did not participate in a fishery, leave that row blank. If crew was paid hourly wages in one or more fishery, and not by a share of net revenue, indicate N/A in the crew share column for that fishery.

Table 4.3 Revenue Shares

BSAI Crab Fishery	BOAT SHARE %	CREW SHARE % (excluding Captain)	CAPTAIN SHARE %
EAG	%	%	%
WAG	%	%	%
BST	%	%	%
BSS	%	%	%
BBR	%	%	%

4. Labor Information

4.4 BSAI Crab Crew Residence (captain and crew)

Employees with Crew Licenses
In Table 4.4a, record the Alaska Commercial Crew license number or the State of Alaska Commercial Fisheries Entry Commission (CFEC) gear operator permit number for each vessel employee participating in any or all BSAI crab fisheries in 2005, and list their location of residence. **Do not count any employee more than once.**

Employees Without Crew Licenses
In Table 4.4b, record the cities of residence of employees without Alaska Commercial Crew license or the CFEC gear operator permit who participated in the crab fisheries in 2005 and the number of employees that are from each residential location. **Do not count any employee more than once.**

Table 4.4a: Employees With Crew License

ALASKA COMMERCIAL CREW LICENSE NO.	CFEC GEAR OPERATOR PERMIT NO.	RESIDENCE (CITY AND STATE)

Table 4.4b: Employees Without Crew License

STATE		IF COUNTRY OTHER THAN UNITED STATES, ENTER PRIMARY COUNTRY OF RESIDENCE	NO. OF EMPLOYEES
IF ALASKA, ENTER PRIMARY CITY OF RESIDENCE	IF OTHER THAN ALASKA, ENTER PRIMARY STATE OF RESIDENCE		

5. Vessel Costs

5.1 Costs for BSAI Crab Fishing Only

In Table 5.1, record the BSAI crab fishery operating costs for this vessel. These are costs that are incurred by this vessel solely in the BSAI Crab fisheries. Section 5.2 will ask for information on costs that cannot be tied exclusively to the BSAI crab fisheries. Include any taxes paid on the listed items (e.g. fuel tax, sales tax) in the totals.

a. Insurance Premiums (Hull, Property and Indemnity, and Pollution): if you paid a specific premium for operating in the BSAI Crab fishery, record the cost here. Record insurance premiums that cannot be attributed just to crab fishing in Section 5.2.c. If you belonged to an insurance pool for the BSAI crab fishery, record the net costs of being in the pool (deposits into the pool minus any dividends received).

b. Insurance deductibles paid for accidents: include any insurance deductibles paid for accidents that occurred on the vessel. Exclude any repair or medical costs paid by the insurance claim (i.e., only list your out-of-pocket expense).

c. Number of crab pots purchased for use in BSAI crab fishery: the total quantity and cost of crab pots purchased for the calendar year. List the city and state where the seller you bought these items from is located. Do not include repair and maintenance of pots (including rebuilding); these costs should be included in Section 5.2 b.

d. Line and Other Crab Gear Purchases: the total expense on line, floats, and other fishing gear other than pots used in BSAI crab fishing. List the city and state where the seller you bought these items from is located.

e. Bait used in BSAI crab fishery, by type: the total quantity (**in pounds)** and cost of bait (by species) used in each listed CR fishery during the calendar year. List the city and state where you bought the bait.

f. Fuel, Lubrication, and Fluids Used in BSAI Crab Fishery: record fuel purchases made for each of the BSAI CR fisheries. List the city and state where you purchased the fuel, the total quantity (**in gallons**) of fuel; and the purchase cost. Indicate in the check box if fuel purchase cost includes lubrication and fluids. Record fuel purchases in each fishery for the entire period in which you were fishing in, traveling to and from, and offloading from each CR fishery. Fuel cost includes fuel taxes.

g. Food and Provisions for Crew: the total cost of these items consumed and used by the crew. Include these costs even if all (or a portion) of them are taken out of the crews' share.

h. Other Crew Costs: list additional expenses for crew and the associated costs (for example, transportation costs, medical costs, payroll taxes, etc.)

i. Freight Costs for Landed Crab: total expenses for shipping crab caught aboard this vessel for sale or processing elsewhere.

j. Storage, Wharfage, and Delivery: the total storage, wharfage and delivery costs for pots and other equipment used aboard this vessel in the crab fisheries.

k. Observer Costs: record the sum of all observer fees paid in each CR fishery for the year.

l. Crab Landing Taxes and Fees: record the sum of all state and local fish taxes (e.g., Alaska fisheries business tax, local landing tax, cost recovery and buyback tax, arbitration assessment, and others) you paid for landing BSAI crab. These taxes and fees were included in the Gross Revenue recorded in Section 2.

m. Fishing Cooperative Costs: please record the total cost to you for this vessel's participation in a BSAI crab fishing cooperative. Exclude any monies paid to purchase or lease crab ITQ. List only the costs associated with membership or operating costs of the cooperative.

n. Other Crab-specific Costs: list additional expenses incurred for BSAI Crab fishing and the associated costs (for example, association/marketing fees, vessel communication costs, vessel leasing costs, pot truck fees, accounting fees, vessel moorage during the crab fishery, overage fines, etc.).

Table 5.1 Costs for BSAI Crab Fishing Only

COST CATEGORY		TOTAL COST
a. Insurance Premiums (Hull, Property and Indemnity, and Pollution)		$
b. Insurance deductibles paid for accidents in 2005		$
c. Number of crab pots purchased for use in BSAI crab fishery		
City and State:	Quantity:	$
City and State:	Quantity:	$
City and State:	Quantity:	$
d. Line and other crab gear purchases		
City and State:		$
City and State:		$
City and State:		$

COST CATEGORY		TOTAL COST
e. Bait used in BSAI Crab Fishery, by type		
CR Fishery Code: **EAG**	City and State:	
Bait Species	Pounds:	$
Bait Species	Pounds:	$
Bait Species	Pounds:	$
CR Fishery Code: **WAG**	City and State:	
Bait Species	Pounds:	$
Bait Species	Pounds:	$
Bait Species	Pounds:	$
CR Fishery Code: **BST**	City and State:	
Bait Species	Pounds:	$
Bait Species	Pounds:	$
Bait Species	Pounds:	$
CR Fishery Code: **BSS**	City and State:	
Bait Species	Pounds:	$
Bait Species	Pounds:	$
Bait Species	Pounds:	$
CR Fishery Code: **BBR**	City and State:	
Bait Species	Pounds:	$
Bait Species	Pounds:-	$
Bait Species	Pounds:	$

f. Fuel, lubrication, and fluids used in BSAI Crab fishery				
CR Fishery Code	City and State	Fuel Quantity (gallons)	Cost includes lube/fluids	Total Cost
EAG			❒ Yes ❒No	$
WAG			❒ Yes ❒No	$
BST			❒ Yes ❒No	$
BSS			❒ Yes ❒No	$
BBR			❒ Yes ❒No	$
g. Food and provisions for crew				$
h. Other crew costs (Describe below)				
				$
				$

COST CATEGORY	TOTAL COST
i. Freight costs for landed crab	$
j. Storage, wharfage, and delivery	$
k. Observer costs	
CR Fishery Code: **EAG**	$
CR Fishery Code: **WAG**	$
CR Fishery Code: **BST**	$
CR Fishery Code: **BSS**	$
CR Fishery Code: **BBR**	$
l. Crab landing taxes and fees	$
m. Crab Harvest Cooperative fees	$
n. Other crab-specific costs (Describe below)	
	$
	$
	$
	$
	$
	$

5.0 Vessel Costs

5.2 Annual Vessel Costs

In Table 5.2, please record all of the following costs that were incurred for your vessel during the 2005 calendar year.. Indicate if these costs were incurred for the BSAI crab fishery only by checking "Yes" under "Crab-only Cost". Otherwise, check "No" and these costs will be averaged out over *all* your crab and non-crab activities during the year.

a. Investments in Vessel, Gear and Equipment: Total cost of improvements or investments in vessel, gear and equipment for the year. This includes the costs of all assets that were purchased in 2005 and will be depreciated for tax purposes. List the city and state where the seller you purchased the improvements from is located. Exclude standard repairs and purchases that are necessary to conduct operations.

b. Repair and Maintenance for Vessel, Gear, and Equipment: the repair and maintenance expenses for maintaining this vessel and repairing mechanical and physical problems with the vessel or equipment (exclude investment expenditures included in item 5.2a). List the city and state where the business or person providing the repair and maintenance work is located. Exclude expenses or repairs that result solely from non-crab fisheries. Include salaries of employees whose job is to perform R&M only if their wages are *not* already included in Section 4.1.

c. Insurance Premiums (Hull, Property and Indemnity, and Pollution): record the total costs of your annual insurance premiums for this vessel.

d. Other vessel-specific costs: record any other significant cost(s) that were incurred in order to fish for crab in calendar year 2005 that were not included in the categories above, and not reported in the crab season-specific table (Section 5.1). Please describe the nature of the expense(s) and do not list costs of permits or licenses.

COST CATEGORY	TOTAL	CRAB ONLY COST
a. Investments in Vessel, Gear and Equipment		
City and State:	$	❒ Yes ❒ No
City and State:	$	❒ Yes ❒ No
City and State:	$	❒ Yes ❒ No
b. Repair and Maintenance for Vessel, Gear and Equipment		
City and State:	$	❒ Yes ❒ No
City and State:	$	❒ Yes ❒ No
City and State:	$	❒ Yes ❒ No
c. Insurance Premiums (Hull, Property and Indemnity, and Pollution)	$	❒ Yes ❒ No
d. Other Vessel-specific Costs. Describe below.		
	$	❒ Yes ❒ No
	$	❒ Yes ❒ No
	$	❒ Yes ❒ No

6. Annual Totals for All Fisheries

Please record the total sum for the calendar year for days at sea, gross revenue, pounds retained, and labor costs. Be sure to include all fishery participation for the calendar year, **including activities other than BSAI Crab fishing (i.e., include groundfish, chartering, tendering, etc**).

	TOTAL
Days at Sea	
Gross Revenue	$
Pounds Retained	
Labor Costs*	$

*Include only the direct compensation made to the crew and captain, as in Section 4.

This page intentionally blank.

This page intentionally blank.

Revised: 3/30/2005

OMB control No. 0648-0518
Expiration Date: 02/29/2008

ANNUAL
CATCHER/PROCESSOR
CRAB ECONOMIC DATA REPORT (EDR)

CALENDAR YEAR 2005

This form can be downloaded from
http://www.fakr.noaa.gov

PUBLIC REPORTING BURDEN STATEMENT

Public reporting burden for this collection of information is estimated to average 12.5 hours per response, including time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden to Assistant Regional Administrator, Sustainable Fisheries Division, NOAA National Marine Fisheries Service, P.O. Box 21668, Juneau, AK 99802-1668.

ADDITIONAL INFORMATION

Before completing this form, please note the following: 1) Notwithstanding any other provision of law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number; 2) This information is mandatory and is required to manage commercial fishing efforts for crab under 50 CFR part 680 and under section 402(a) of the Magnuson-Stevens Act (16 U.S.C. 1801, *et seq*.) And 16 U.S.C. 1862(j); 3) Responses to this information request are confidential under section 402(b) of the Magnuson-Stevens Act (16 U.S.C. 1801, *et seq*.). They are also confidential under NOAA Administrative Order 216-100, which sets forth procedures to protect confidentiality of fishery statistics.

ANNUAL CATCHER/PROCESSOR EDR

Introduction

This report collects information on Bering Sea and Aleutian Islands Management Area (BSAI) crab operations, including Western Alaska Community Development Quota Program (CDQ) crab fisheries. The fisheries are referred to as Crab Rationalization fisheries (CR fisheries). Pursuant to the legislation, the data and identifiers will also be used for program enforcement and determination of qualification for quota shares. Consequently, identifiers and data will be disclosed to NOAA Enforcement, NOAA General Counsel, the Antitrust Division of the Department of Justice, the Federal Trade Commission, and NOAA Restricted Access Management Program.

You have received this form because our records show that you are either the owner of a catcher/processor that participated in the BSAI crab fisheries in the past or were leased a catcher/processor that participated in the BSAI crab fisheries in the past. **You are required to submit the Certification Pages (pages 5 and 6) and any additional information requested in the Economic Data Report (EDR). Failure to submit an EDR form when required will result in delay in and/or acceptance of any and all crab permit applications**.

To make sure that each company is consistently and accurately completing the EDR, random audits will be performed by a qualified accountant on some of the EDRs for a subset of the crab fishery participants. This step will ensure that the data can be relied upon to produce accurate and reliable information for the Alaska crab fisheries.

Auditors will verify records by comparing specific elements of the report with your accounting records. To make this activity as efficient and non-intrusive as possible, we suggest that you:

1. Keep a copy of the completed EDR or certification pages you submit to the Data Collection Agent (DCA). Copy and attach extra sheets as needed.

2. Keep a file that has all of the supporting information used in the preparation of the EDR.

3. Make sure that the EDR agrees to the company's highest level of financial information. For this purpose, the highest level of financial information is defined in order as:

    a. Audited financial statements
    b. Reviewed financial statements
    c. Compiled financial statements
    d. Tax returns.

Record only whole numbers. Round up dollar figures to the next highest dollar.

If YOUR label address is incorrect or missing, please correct the error on the label or print your permanent name and address here.

Catcher/processor Name
Company Name
Street address or P.O. Box Number
City, State, and Zip Code

NOTE:

Any owner or leaseholder of a catcher/processor during any period in the calendar year identified on the EDR in which the catcher/processor was used to process crab in a Crab Rationalization (CR) fishery must submit to the DCA, at the address provided on the form, an EDR for a catcher/processor.

Definition of "Leaseholder": For the purpose of defining the persons responsible for submitting the EDR, a Leaseholder is a person, other than the owner of the catcher/processor for which the EDR is required, who: was identified as the leaseholder, in a written lease, of the catcher/processor, **OR** paid expenses of the catcher/processor, **OR** claimed expenses for the catcher/processor as a business expense on schedule C of his/her Federal Income Tax Return, or on a State Income Tax Return.

Mail or FAX Certification Pages or Entire EDR by June 28, 2006 to:

Pacific States Marine Fisheries Commission
205 SE Spokane, Suite 100
Portland, OR 97202

FAX Number: 503-595-3450

For more information or if you have questions,
please call toll free 1-877-741-8913

This page intentionally blank.

CERTIFICATION PAGE – 1 of 3

This is a **required form**. Provide all information requested below.

Catcher/Processor Information	
Catcher/Processor Name	ADF&G Processor Code
	Registered Crab Receiver Permit Number
USCG Documentation Number	Crab License Limitation Permit Number(s)
Current Estimated Market Value of Vessel and Equipment ($)	Replacement Value of Vessel and Equipment ($)
Name of Crab Harvesting Cooperative (if applicable)	

Owner Information	
Name of company, partnership, or sole proprietorship	
Business Telephone Number	Business FAX Number
Business E-mail address, if available	

Leaseholder Information (if applicable)	
Name of company, partnership, or sole proprietorship	
Business Telephone Number	Business FAX Number
Business E-mail address, if available	

NOTE: Any owner or leaseholder may appoint a designated representative to respond to questions in the EDR. The designated representative is the primary contact person for the DCA on issues relating to data required in the EDR.

Person Completing this Report (check one)

❒ Owner (If your name and address are the same name and address provided in the Owner Information block above, the information does not need to be repeated here)

❒ Leaseholder (If your name and address are the same name and address provided in the Leaseholder Information block above, the information does not need to be repeated here)

❒ Designated Representative (complete information below)

Name	Title
Business Number Telephone	Business FAX Number
Business E-mail address (if available)	

CERTIFICATION PAGE – 2 of 3

Select one of the following statements and provide any requested information. Check one box below.

<table>
<tr><td colspan="2">❒ 1. You are the catcher/processor owner, and you processed BSAI crab in the above described vessel during the 2005 calendar year.

Complete and submit Entire EDR for the 2005 calendar year.</td></tr>
<tr><td colspan="2">❒ 2. You are the catcher/processor leaseholder, you processed BSAI crab in the above described vessel during the 2005 calendar year.

Complete and submit Entire EDR for the 2005 calendar year.</td></tr>
<tr><td rowspan="4">❒ 3. You are the catcher/processor owner, and you leased the above described vessel for a portion of the year to another party, and processed some BSAI crab in the above described catcher/processor during the 2005 calendar year.

Provide the name, address, and telephone number of the person to whom you leased the vessel during the 2005 calendar year.

Complete and submit Entire EDR for the 2005 calendar year.</td><td>Leaseholder Name</td></tr>
<tr><td>Street address or P.O. Box</td></tr>
<tr><td>City, State, and Zip Code</td></tr>
<tr><td>Telephone No. (include area code)</td></tr>
</table>

CERTIFICATION PAGE – 3 of 3

<table>
<tr>
<td rowspan="4">❒ 4. You are the catcher/processor owner, you leased or sold the above described vessel to another party, and processed no BSAI crab in the above described vessel during the 2005 calendar year,

Provide the name, address, and telephone number of the person to whom you leased or sold the vessel during the 2005 calendar year.

OR

You are the catcher/processor owner and vessel was lost or rendered permanently inoperable due to accident, and processed no BSAI crab in the above described vessel during the 2005 calendar year,

Indicate status of vessel:

❒ Leased ❒ Sold ❒ Lost

Complete and submit the EDR Certification Pages only.</td>
<td>Leaseholder Name</td>
</tr>
<tr>
<td>Street address or P.O. Box</td>
</tr>
<tr>
<td>City, State, and Zip Code</td>
</tr>
<tr>
<td>Telephone No. (include area code)</td>
</tr>
<tr>
<td colspan="2">❒ 5. You are the catcher/processor owner, and no one processed BSAI crab in the above described catcher/processor during the 2005 calendar year. Complete and submit the EDR Certification Pages only.</td>
</tr>
</table>

Sign and date the appropriate box below:

<table>
<tr><td>If you checked Box 1, Box 2, or Box 3 above, SUBMIT ENTIRE EDR INCLUDING CERTIFICATION PAGES. Sign in the space below.</td></tr>
<tr><td>I certify under penalty of perjury that I have reviewed all the information in this report and that it is true and complete to the best of my knowledge.</td></tr>
<tr><td>Signature Date signed</td></tr>
</table>

<table>
<tr><td>If you checked Box 4 or Box 5 above, DO NOT SUBMIT ENTIRE EDR – SUBMIT ONLY THE CERTIFICATION PAGES. Sign in the space below.</td></tr>
<tr><td>I certify under penalty of perjury that I do not meet any of the conditions required under statements 1, 2, or 3 above to submit an entire EDR.</td></tr>
<tr><td>Signature Date signed</td></tr>
</table>

This page intentionally blank.

Tables A through F contain information you will need when completing the EDR forms.

Table A. Crab CR Fisheries

Fishery Code	CR Fishery	Geographic Area
EAG	Eastern Aleutian Islands golden king crab (*Lithodes aequispinus)*	in waters of the EEZ with **an eastern boundary** the longitude of Scotch Cap Light (164° 44' W. long.) to 53E 30' N. lat., then West to 165E W. long. **a western boundary** of 174° W. long., and **a northern boundary** of a line from the latitude of Cape Sarichef (54° 36' N. lat.) westward to 171° W. long., then north to 55° 30' N. lat., then west to 174° W. long.
WAG	Western Aleutian Islands golden king crab (*Lithodes aequispinus*)	in waters of the EEZ with **an eastern boundary** the longitude 174° W. long., **a western boundary** the Maritime Boundary Agreement Line as that line is described in the text of and depicted in the annex to the Maritime Boundary Agreement between the United States and the Union of Soviet Socialist Republics signed in Washington, June 1, 1990, and as the Maritime Boundary Agreement Line as depicted on NOAA Chart No. 513 (6th edition, February 23, 1991) and NOAA Chart No. 514 (6th edition, February 16, 1991), and **a northern boundary** of a line from the latitude of 55E30' N. lat., then west to the U.S.-Russian Convention line of 1867.
BST	Bering Sea Tanner crab (*Chionoecetes bairdi)*	in waters of the EEZ east of the Maritime Boundary Agreement Line as that line is described in the text of and depicted in the annex to the Maritime Boundary Agreement between the United States and the Union of Soviet Socialist Republics signed in Washington, June 1, 1990, and as the Maritime Boundary Agreement Line as depicted on NOAA Chart No. 513 (6th edition, February 23, 1991) and NOAA Chart No. 514 (6th edition, February 16, 1991) to 171E W. long., and then south to 54E30'N. lat. with **a southern boundary** of 54° 36' N. lat.
BSS	Bering Sea Snow crab (*Chionoecetes opilio)*	in waters of the EEZ east of the Maritime Boundary Agreement Line as that line is described in the text of and depicted in the annex to the Maritime Boundary Agreement between the United States and the Union of Soviet Socialist Republics signed in Washington, June 1, 1990, and as the Maritime Boundary Agreement Line as depicted on NOAA Chart No. 513 (6th edition, February 23, 1991) and NOAA Chart No. 514 (6th edition, February 16, 1991) to 171E W. long., and then south to 54° 30' N. lat. with **a southern boundary** of 54° 36' N.
BBR	Bristol Bay red king crab (*Paralithodes camtschaticus*)	in waters of the EEZ with **a northern boundary** of 58° 30' N. lat., **a southern boundary** of 54° 36' N. lat., and **a western boundary** of 168° W. long. and including all waters of Bristol Bay.

Table B. Crab Species Codes		
Species Code	Common Name	Scientific Name
900	Box	*Lopholithodes mandtii*
910	Dungeness	*Cancer magister*
921	Red king crab	*Paralithodes camtschaticus*
922	Blue king crab	*Paralithodes platypus*
923	Golden (brown) king crab	*Lithodes aequispinus*
924	Scarlet king crab	*Lithodes couesi*
931	Tanner crab	*Chionoecetes bairdi*
932	Snow crab	*Chionoecetes opilio*
933	Grooved Tanner crab	*Chionoecetes tanneri*
934	Triangle Tanner crab	*Chionoecetes angulatus*
940	Korean horsehair crab	*Erimacrus isenbeckii*
951	Multispinus crab	*Paralomis multispinus*
953	Verrilli crab	*Paralomis verrilli*

Table C. Crab Product Codes Used for EDRs	
Product Code	Description
01	Whole crab
80	Crab sections
81	Crab meats
97	Other crab product (specify):

Table D. Crab Process Codes.
(1)If multiple processes were used during a crab fishery, record the information for each process on a separate line.
(2) If more than one of the following processes was used to create a specific product (such as brined and frozen crab, or cooked and frozen crab) you may enter more than one process code in the process code box for that product."

Process Code	Description
00	Other (specify):
01	Fresh
02	Frozen
03	Salted/brined
06	Cooked
07	Live
18	Fresh/vacuum pack
21	Frozen/block
22	Frozen/shatter pack
28	Frozen/vacuum pack

Table E. Crab Size Codes.
If different sizes of crab were packed separately for a given product form, record the total amount produced, by size, on separate lines.

Size Code	Description
1	Standard or large sized crab or crab sections
2	Smaller size crab or crab sections, e.g., *opilio* crab less than 4 inches.

Table F. Crab Grade Codes
If different grades of crab were packed separately for a given product form, record the total amount produced, by grade, on separate lines.

Grade Code	Description
1	Standard or premium quality crab or crab sections
2	Lower quality product, e.g., dirty shelled crab or a pack that is of lower quality than No. 1 crab.

Instructions: Provide all information requested in each section.. Please record only whole numbers, and round all dollar values to the next highest dollar.

1. Harvesting and Processing Information

1.1 BSAI Crab Activity Chart

Record the following data for each CR fishery in which this vessel participated. Leave the row blank for any fisheries the vessel did not participate in.

Dates Covered
Record the beginning and ending date (MM/DD/YY) for the period in which you participated in the listed fishery.

Number of Days Fishing
Record the total number of days during each fishery that the vessel was operating in the fishing grounds. Do not include time spent waiting at processors or traveling to and from the fishing grounds.

Number of Days Traveling and Offloading
Record the number of days during each fishery that the vessel spent traveling to and from fishing grounds or waiting to offload at processors.

Number of Days Crab Processing
Record the total number of days on which you processed crab in each CR fishery.

Table 1.1: BSAI Crab Fishery Activity

CR FISHERY CODE	DATES COVERED MM/DD/YY TO MM/DD/YY		NUMBER OF DAYS FISHING	NUMBER OF DAYS TRAVELING & OFFLOADING	NUMBER OF DAYS CRAB PROCESSING
EAG					
WAG					
BST					
BSS					
BBR					

1. Harvesting and Processing Information

1.2 BSAI Crab Production

Record the following information on finished crab production in the tables 1.2 a-e below for each CR fishery in which this vessel participated. Leave the table blank for any fisheries in which the vessel did not participate.

Raw Crab Pounds
Record the number of raw crab pounds used in processing each species in each CR fishery.

Product Code
Record the product code from Table C for each product. If multiple products were produced, record the information for each product on a separate line.

Process Code
Record the process code from Table D for each product.
(1) If multiple processes were used during a crab fishery, record the information for each process on a separate line.
(2) If more than one of the following processes was used to create a specific product (such as brined *and* frozen crab, or cooked *and* frozen crab) you may enter more than one process code in the process code box for that product.

Crab Size
Record the crab size from Table E for each product. If different sizes of crab were packed separately for a given product form, record the total amount produced, by size, on separate lines.

Crab Grade
Record the crab grade from Table F for each product. If different grades of crab were packed separately for a given product form, record the total amount produced, by grade, on separate lines.

Box Size
Record the box size associated with each product. Indicate whether the box is pounds or kilograms by checking the appropriate box. If different box sizes were produced, record the total amount for each box size on a separate line.

Finished Pounds
Record the number of finished pounds produced for each product.

Custom Processed (Yes or No)
Record custom and non-custom processing activities on separate lines. Check “Yes” or “No” to indicate if the recorded production was custom processing done by you for another party.

Table 1.2a: Eastern Aleutian Islands Golden CR Fishery

CR Fishery Code: **EAG**			Raw Crab Pounds:			
PRODUCT CODE	PROCESS CODE	CRAB SIZE	CRAB GRADE	BOX SIZE (check lb or kg)	FINISHED POUNDS	CUSTOM PROCESSED (check one)
				❐ lb ❐ kg	lbs	❐ Yes ❐ No
				❐ lb ❐ kg	lbs	❐ Yes ❐ No
				❐ lb ❐ kg	lbs	❐ Yes ❐ No
				❐ lb ❐ kg	lbs	❐ Yes ❐ No
				❐ lb ❐ kg	lbs	❐ Yes ❐ No
				❐ lb ❐ kg	lbs	❐ Yes ❐ No
				❐ lb ❐ kg	lbs	❐ Yes ❐ No
				❐ lb ❐ kg	lbs	❐ Yes ❐ No
				❐ lb ❐ kg	lbs	❐ Yes ❐ No
				❐ lb ❐ kg	lbs	❐ Yes ❐ No

Table 1.2b: Western Aleutian Islands Golden CR Fishery

CR Fishery Code: **WAG**			Raw Crab Pounds:			
PRODUCT CODE	PROCESS CODE	CRAB SIZE	CRAB GRADE	BOX SIZE (check lb or kg)	FINISHED POUNDS	CUSTOM PROCESSED (check one)
				❐ lb ❐ kg	lbs	❐ Yes ❐ No
				❐ lb ❐ kg	lbs	❐ Yes ❐ No
				❐ lb ❐ kg	lbs	❐ Yes ❐ No
				❐ lb ❐ kg	lbs	❐ Yes ❐ No
				❐ lb ❐ kg	lbs	❐ Yes ❐ No
				❐ lb ❐ kg	lbs	❐ Yes ❐ No
				❐ lb ❐ kg	lbs	❐ Yes ❐ No
				❐ lb ❐ kg	lbs	❐ Yes ❐ No
				❐ lb ❐ kg	lbs	❐ Yes ❐ No
				❐ lb ❐ kg	lbs	❐ Yes ❐ No

Table 1.2c: Bering Sea Tanner CR Fishery

CR Fishery Code: **BST**				Raw Crab Pounds:		
PRODUCT CODE	PROCESS CODE	CRAB SIZE	CRAB GRADE	BOX SIZE (check lb or kg)	FINISHED POUNDS	CUSTOM PROCESSED (check one)
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No

Table 1.2d: Bering Sea Snow CR Fishery

CR Fishery Code: **BSS**				Raw Crab Pounds:		
PRODUCT CODE	PROCESS CODE	CRAB SIZE	CRAB GRADE	BOX SIZE (check lb or kg)	FINISHED POUNDS	CUSTOM PROCESSED (check one)
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No

Table 1.2e: Bristol Bay Red CR Fishery

CR Fishery Code: **BBR**			Raw Crab Pounds:			
PRODUCT CODE	PROCESS CODE	CRAB SIZE	CRAB GRADE	BOX SIZE (check lb or kg)	FINISHED POUNDS	CUSTOM PROCESSED (check one)
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No
				❒ lb ❒ kg	lbs	❒ Yes ❒ No

2. BSAI Crab Sales and Processing

2.1 Annual BSAI Crab Sales

Record the following information on crab sales to affiliated entities (Table 2.1a) and to unaffiliated entities (Table 2.1b). For further details on the definition of "Affiliation" please refer to the federal regulations at 50 CFR part 680.2. Sales for 2005 would include sales of products produced in 2005 or sales from inventory (products that were harvested and processed in a prior year).

Species Code
Record the species code from Table B for each product sold in 2005. If multiple species were sold, record the information on a separate line.

Product Code
Record the product code from Table C for each product. If multiple products were sold, record the information for each product on a separate line.

Process Code
Record the process code from Table D for each product.
(1)If multiple processes were used during the year, record the information for each process on a separate line.
(2) If more than one of the following processes was used to create a specific product (such as brined and frozen crab, or cooked and frozen crab) you may enter more than one process code in the process code box for that product.

Crab Size
Record the crab size from Table E for each product. If different sizes of crab were packed separately for a given product form, record the total amount produced, by size, on separate lines.

Crab Grade
Record the crab grade from Table F for each product. If different grades of crab were packed separately for a given product form, record the total amount produced, by grade, on separate lines.

Box Size
Record the box size associated with each product. Indicate whether the box is in pounds or kilograms by checking the appropriate box. If different box sizes were sold, record the total amount for each box size on separate lines.

Finished Pounds
Record the total pounds of each product sold.

FOB Alaska/Seattle Revenues
Indicate in checkbox the shipping point for FOB revenues. Record the amount you received for each product sold. Do not include any additional payment you received to cover any shipping, handling, or storage costs associated with the sale beyond the FOB port. Do not deduct any broker fees or taxes paid (record these costs separately in Section 7.1).

Table 2.1a: BSAI Crab Sales to Affiliated Entities

SPECIES CODE	PRODUCT CODE	PROCESS CODE	CRAB SIZE	CRAB GRADE	BOX SIZE (circle lb or kg)	FINISHED POUNDS	FOB REVENUES ❒ Alaska ❒ Seattle
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$

Table 2.1b: BSAI Crab Sales to Unaffiliated Entities

SPECIES CODE	PRODUCT CODE	PROCESS CODE	CRAB SIZE	CRAB GRADE	BOX SIZE (circle lb or kg)	FINISHED POUNDS	FOB REVENUES ❒ Alaska ❒ Seattle
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$
					❒ lb ❒ kg		$

2. BSAI Crab Sales and Processing

2.2 Custom Processing Services Provided

CR fishery code
Record the code from Table A for each CR fishery in which you participated. If you participated in multiple crab fisheries, record information for each on separate lines.

Product Code
Record the product code from Table C for each product. If multiple products were processed, record the information for each product on a separate line.

Process Code
Record the process code from Table D for each product.
(1)If multiple processes were used during the year, record the information for each process on a separate line.
(2) If more than one of the following processes was used to create a specific product (such as brined *and* frozen crab, or cooked *and* frozen crab) you may enter more than one process code in the process code box for that product.

Custom Processing Revenue
Record the revenue received for custom processing the specified products.

Table 2.2: Custom Processing Services Provided

CR FISHERY CODE	PRODUCT CODE	PROCESS CODE	CUSTOM PROCESSING REVENUE
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$
			$

3. BSAI Crab Quota

3.1 Catcher/Processor IFQ and IPQ Allocation

Record information only for the annual allocation of IFQ to the catcher/processor owner or leaseholder submitting this EDR. Information on IFQ allocated to other entities and harvested or processed by this vessel (CDQ and IFQ from other quota holders) will be collected in Table 3.2. Record the data for each CR fishery in which this catcher/processor participated. Leave the row blank for any fisheries in which the catcher/processor did not participate.

CPO – IFQ Harvested: record the amount of this catcher/processor owner's (or leaseholder's) allocation of Catcher/Processor Owner (CPO) IFQ pounds harvested in the listed fishery.

IFQ A Harvested: record the amount of this catcher/processor owner's (or leaseholder's) allocation of IFQ A-class pounds harvested in the listed fishery.

IFQ B Harvested: record the amount of this catcher/processor owner's (or leaseholder's) allocation of IFQ B-class pounds harvested in the listed fishery.

IPQ Processed: record the amount of this catcher/processor owner's (or leaseholder's) allocation of IPQ pounds processed in the listed fishery.

CPO – IFQ Transferred

Pounds: Record the number of pounds of this vessel owner's (or leaseholder's) allocation of CPO-IFQ harvested by other vessels (either through formal lease or other agreement) in the listed fishery.

Revenue: Record total payment received from other vessels for use of the transferred CPO-IFQ pounds in the listed fishery.

IFQ A Transferred

Pounds: Record the number of pounds of this vessel owner's (or leaseholder's) allocation of IFQ-A harvested by other vessels (either through formal lease or other agreement) in the listed fishery.

Revenue: Record total payment received from other vessels for use of the transferred IFQ-A pounds in the listed fishery.

IFQ B Transferred

Pounds: Record the number of pounds of this vessel owner's (or leaseholder's) allocation of IFQ-B harvested by other vessels (either through formal lease or other agreement) in the listed fishery.

Revenue: Record total payment received from other vessels for use of the transferred IFQ-B pounds in the listed fishery.

Table 3.1 Catcher/Processor IFQ Allocation

CR FISHERY CODE	IFQ and IPQ ALLOCATION									
	CPO-IFQ Harvested (pounds)	IFQ A Harvested (pounds)	IFQ B Harvested (pounds)	IPQ Processed (pounds)	CPO-IFQ Transferred		IFQ A Transferred		IFQ B Transferred	
					Pounds	Revenue	Pounds	Revenue	Pounds	Revenue
EAG										
WAG										
BST										
BSS										
BBR										

3. BSAI Crab Quota

3.2 BSAI Crab CDQ and IFQ Lease Costs

In the table below, please record the totals forCDQ and IFQ *owned by other entities* that were harvested or processed by this catcher/processor in the listed BSAI Crab fisheries. Please include all quota obtained, through either a formal lease or informal agreement (such as stacking or pooling within harvest cooperatives or harvest of IFQ held by crew).

If you had an arrangement under which you harvested or processed another holder's quota and paid them a percentage (for example, 70%) of the revenues from the harvested or processed quota, record the total pounds and the total dollar amount of the revenues paid to the quota holders(s), for each class of quota (CDQ, CPO-IFQ, IFQ-A, IFQ-B, IFQ- C).

Report only the direct costs of acquiring CDQ or IFQ. Indirect costs (e.g., harvest cooperative fees) will be recorded in Section 6.1. If you did not acquire additional quota for one or more fishery, indicate N/A on that line.

Record the data for each CR fishery in which this catcher/processor participated. Leave the row blank for any fisheries in which the catcher/processor did not participate.

Adak WAG IFQ and Community Development Quota (CDQ):

Pounds : If you acquired the right to land a given amount of Adak IFQ (in the Western Aleutian Islands golden king crab fishery) or CDQ, for 2005, enter the number of pounds.
Total Cost: Record the total cost of the **Adak IFQ or CDQ** crab you acquired in each CR fishery for each species.

CPO-IFQ

Pounds: If you acquired the right to land additional **CPO-IFQ** crab for 2005 (beyond your original allocation), enter the number of pounds.

Total Cost: Record the total cost of the additional **CPO-IFQ** crab you acquired in each CR fishery for each species.

IFQ A

Pounds: If you acquired the right to land additional **IFQ A-class** crab for 2005 (beyond your original allocation), enter the number of pounds.
Total Cost: Record the total cost of the additional **IFQ A-class** crab you acquired in each CR fishery for each species.

IFQ B

Pounds: If you acquired the right to land additional **IFQ B-class** crab for 2005 (beyond your original allocation), enter the number of pounds.
Total Cost: Record the total cost of the additional **IFQ B-class** crab you acquired in each CR fishery for each species.

IFQ C – Captain:

Pounds: Record the number of pounds of **IFQ Catcher/processor Crew ("C-class")** crab quota owned by the vessel captain and harvested by this vessel.
Total Cost: Enter the amount in dollars paid to the Captain for the IFQ. Do not include payments made to the captain for his labor - these will be reported in Section 4.

IFQ C – Crew:

Pounds: Record the number of pounds of **IFQ Catcher/processor Crew ("C-class")** crab quota owned by the vessel crew (excluding the captain) and harvested by the vessel.
Total Cost: Enter the total amount in dollars paid to crew members for the IFQ. Do not include payments made to the crew for labor - these will be reported in Section 4.
Number of Crew: Record the number of crew members contributing IFQ to the harvest.

Table 3.2 BSAI Crab CDQ and IFQ Lease Costs

CR FISHERY CODE	CDQ/Adak IFQ		CPO-IFQ		IFQ A		IFQ B		IFQ C - CAPTAIN		IFQ C - CREW		
	Pounds	Total Cost	Pounds	Total Cost	Pounds	Total Cost	Pounds	Total Cost	Pounds	Total Cost	Pounds	Total Cost	Number of Crew
EAG													
WAG													
BST													
BSS													
BBR													

4. Labor Information

4.1 Crab Harvesting Labor Costs

Record the following information for crew who harvest crab and whose pay is based primarily on their harvesting work. Record the data for each CR fishery in which this catcher/processor participated. Leave the row blank for any fisheries in which the catcher/processor did not participate.

No. of Paid Harvest Crew Members (exclude the captain): Record the number of crew aboard the vessel (exclude captain) who provided crab harvesting labor.

Total Labor Payment to Harvest Crew (exclude the captain)
Record the total payment made to crew (exclude the captain) for their crab harvesting labor. List the amount actually paid to crew in their settlement, *not* their earnings before crew-related expenses (such as fuel, bait, or food and provisions) were deducted. Exclude any payments to crew for their IFQ (enter this in Table 3.2).

Captain Labor Payment
Record the total payment made to the captain for his services. List the amount actually paid to the captain, *not* the earnings before shared expenses (such as fuel, bait, or food and provisions) were deducted. Exclude any payments to captain for his/her IFQ (enter this in Table 3.2).

Table 4.1: Crab Harvesting Labor Payments to Captain and Crew

CR FISHERY CODE	CAPTAIN	CREW	
	Total Labor Payment to Captain	Number of Paid Harvest Crew Members	Total Labor Payment to Harvest Crew
EAG	$		$
WAG	$		$
BST	$		$
BSS	$		$
BBR	$		$

4. Labor Information

4.2 Crab Processing Labor Costs

Record the following information for crew who process crab and whose pay is based primarily on their processing work. Record the data for each CR fishery in which this catcher/processor participated. Leave the row blank for any fisheries in which the catcher/processor did not participate.

No. of Crew with Pay Determined by Processing Work
Except salaried employees, (include them in Section 6.2c), record the total number of processing employees whose pay was determined primarily by their crab processing activities. Do not include crew listed in the harvesting labor information above.

Average No. of Crab Processing Positions
Enter the average number of employees engaged in crab processing on the days that you processed crab. This number may exceed the number of employees with pay determined by processing work if some of the harvesting crew assisted in the processing operations.

Total Processing Labor Payment
Except salaried employees, (include these costs in Section 6.2c), record the total payment made to crab processing employees. List the amount actually paid to crew, not their earnings before crew-related expenses (such as food and provisions) were taken out.

Table 4.2: Crab Processing Labor Costs

CR FISHERY CODE	NO. OF CREW WITH PAY DETERMINED BY PROCESSING WORK	AVERAGE NO. OF CRAB PROCESSING POSITIONS	TOTAL PROCESSING LABOR PAYMENT
EAG			$
WAG			$
BST			$
BSS			$
BBR			$

4. Labor Information

4.3 Labor Payment Details

In Table 4.3 below, indicate by checking the appropriate column whether the following expenses were deducted (shared expenses taken off the top of gross revenues), directly charged (charged to an individual after the crew share is calculated), not charged to crew, or not applicable when calculating the crew payments in BSAI crab fisheries.

Table 4.3: Labor Payment Details

EXPENSES	CHECK ONE			
	DEDUCTED	DIRECTLY CHARGED	NOT CHARGED TO CREW	NOT APPLICABLE
Fuel and lubrication	❒	❒	❒	❒
Food and provisions	❒	❒	❒	❒
Bait	❒	❒	❒	❒
Fish tax (see Section 7.1.l)	❒	❒	❒	❒
Observer costs	❒	❒	❒	❒
CDQ costs (from Table 3.2)	❒	❒	❒	❒
IFQ costs (from Table 3.2)	❒	❒	❒	❒
IPQ costs (from Table 3.2)	❒	❒	❒	❒
Freight	❒	❒	❒	❒
Gear loss	❒	❒	❒	❒
Other (describe):	❒	❒	❒	❒
	❒	❒	❒	❒
	❒	❒	❒	❒

4. Labor Information

4.4 Harvest Crew Revenue Shares

In Table 4.4, indicate what percentage of the net share (total revenues minus the expenses listed in Table 4.3) was paid to the boat, crew, and captain for each of the listed CR fisheries. If you did not participate in a fishery, leave that row blank. If crew was paid hourly wages in one or more fishery, and not by a share of net revenue, indicate N/A in the crew share column for that fishery.

Table 4.4 Harvest Revenue Shares

CR FISHERY CODE	BOAT SHARE %	CREW SHARE % (excluding Captain)	CAPTAIN SHARE %
EAG	%	%	%
WAG	%	%	%
BST	%	%	%
BSS	%	%	%
BBR	%	%	%

4. Labor Information

4.5 Processing Worker Revenue Shares

If processing workers were paid on a share system, what percentage of the net share (if applicable) was applied to processing workers based on product value or net share? Indicate N/A (not applicable) if processing workers were not paid according to a share system.

Table 4.5: Processing Worker Revenue Shares

SHARE BASIS	SHARE %
Percentage of product value	%
Percentage of net share (total revenues minus the expenses indicated in Table 4.3) *	%

*NOTE: if you enter a value in this box, this percent share + the boat share + harvesting crew share + captain share (both from Table 4.4) should sum to 100%.

4. Labor Information

4.6 BSAI Crab Crew Residence (captain and crew)

Employees with Crew Licenses
In Table 4.6a, record the Alaska Commercial Crew license number or the State of Alaska Commercial Fisheries Entry Commission (CFEC) gear operator permit number for each vessel employee participating in any or all BSAI crab fisheries in 2005, and list their location of residence. **Do not count any employee more than once.**

Employees Without Crew Licenses
In Table 4.6b, record the cities of residence of employees without Alaska Commercial Crew license or the CFEC gear operator permit who participated in the crab fisheries in 2005 and the number of employees that are from each residential location. **Do not count any employee more than once.**

Table 4.6a: Employees With Crew License

ALASKA COMMERCIAL CREW LICENSE NO.	CFEC GEAR OPERATOR PERMIT NO.	RESIDENCE (CITY AND STATE)

Table 4.6a: Employees Without Crew License

STATE		IF COUNTRY OTHER THAN UNITED STATES, ENTER PRIMARY COUNTRY OF RESIDENCE	NO. OF EMPLOYEES
IF ALASKA, ENTER PRIMARY CITY OF RESIDENCE	IF OTHER THAN ALASKA, ENTER PRIMARY STATE OF RESIDENCE		

5. BSAI Crab Custom Processing Done for You

Record the following information on custom crab processing paid for by the catcher/processor owner (or leaseholder) submitting this EDR in tables below. Record information for each CR fishery in which custom processing was obtained. Leave the table blank for any fisheries in which no custom processing was done.

Raw Pounds Supplied to Custom Processors
For each CR fishery, record the number of raw crab pounds you supplied to the custom processor for processing on your behalf.

Product Code
Record the product code from Table C for each product. If multiple products were produced, record the information for each product on a separate line.

Process Code
Record the process code from Table D for each product.
(1)If multiple processes were used during a crab fishery, record the information for each process on a separate line.
(2) If more than one of the following processes was used to create a specific product (such as brined *and* frozen crab, or cooked *and* frozen crab) you may enter more than one process code in the process code box for that product.

Crab Size
Record the crab size from Table E for each product. If different sizes of crab were packed separately for a given product form, record the total amount produced, by size, on separate lines.

Crab Grade
Record the crab grade from Table F for each product. If different grades of crab were packed separately for a given product form, record the total amount produced, by grade, on separate lines.

Box Size
Record the box size associated with each product. Indicate whether the box is in pounds or kilograms by checking the appropriate box. If different box sizes were produced, record the total amount for each box size on a separate line.

Finished Pounds
Record the number of finished pounds produced for each product.

Processing Fee
Record the payment made to custom processors for each crab product.

Table 5.a: Eastern Aleutian Islands Golden CR Fishery

CR Fishery Code: EAG		Raw Pounds Supplied to Custom Processors:				
PRODUCT CODE	PROCESS CODE	CRAB SIZE	CRAB GRADE	BOX SIZE (circle lb or kg)	FINISHED POUNDS	PROCESSING FEE
				lb/kg	lbs	$
				lb/kg	lbs	$
				lb/kg	lbs	$
				lb/kg	lbs	$
				lb/kg	lbs	$

Table 5.b: Western Aleutian Islands Golden CR Fishery

CR Fishery Code: WAG		Raw Pounds Supplied to Custom Processors:				
PRODUCT CODE	PROCESS CODE	CRAB SIZE	CRAB GRADE	BOX SIZE (circle lb or kg)	FINISHED POUNDS	PROCESSING FEE
				lb/kg	lbs	$
				lb/kg	lbs	$
				lb/kg	lbs	$
				lb/kg	lbs	$
				lb/kg	lbs	$

Table 5.c: Bering Sea Tanner CR Fishery

CR Fishery Code: BST		Raw Pounds Supplied to Custom Processors:				
PRODUCT CODE	PROCESS CODE	CRAB SIZE	CRAB GRADE	BOX SIZE (circle lb or kg)	FINISHED POUNDS	PROCESSING FEE
				lb/kg	lbs	$
				lb/kg	lbs	$
				lb/kg	lbs	$
				lb/kg	lbs	$
				lb/kg	lbs	$

Table 5.d: Bering Sea Snow CR Fishery

CR Fishery Code: BSS		Raw Pounds Supplied to Custom Processors:				
PRODUCT CODE	PROCESS CODE	CRAB SIZE	CRAB GRADE	BOX SIZE (circle lb or kg)	FINISHED POUNDS	PROCESSING FEE
				lb/kg	lbs	$
				lb/kg	lbs	$
				lb/kg	lbs	$
				lb/kg	lbs	$
				lb/kg	lbs	$

Table 5.e: Bristol Bay Red CR Fishery

CR Fishery Code: BBR		Raw Pounds Supplied to Custom Processors:				
PRODUCT CODE	PROCESS CODE	CRAB SIZE	CRAB GRADE	BOX SIZE (circle lb or kg)	FINISHED POUNDS	PROCESSING FEE
				lb/kg	lbs	$
				lb/kg	lbs	$
				lb/kg	lbs	$
				lb/kg	lbs	$
				lb/kg	lbs	$

6. Raw Crab Purchases from Delivering Vessels

Record the following information on raw crab purchases from delivering vessels in tables below. Record information for each CR fishery in which raw crab was purchased. Leave the table blank for any fisheries in which no raw crab purchases were made.

Crab Size
Record the crab size from Table E for each species. If different sizes of crab were purchased in a CR fishery, record the amounts on separate lines.

Crab Grade
Record the crab grade from Table F for each species. If different grades of crab were purchased, record the totals for each species on separate lines.

Raw Pounds Purchased
Record the total pounds of raw crab purchased, by size and grade for each crab species.

Gross Payment
Record amount paid to fishers for raw crab purchased from each crab species. Gross revenue includes the value of any taxes paid on behalf of delivering vessels. Include any post-season adjustments in the gross payment totals.

Table 6.a: Raw Crab Purchases, Eastern Aleutian Islands Golden (EAG) CR Fishery

CRAB SIZE	CRAB GRADE	RAW POUNDS PURCHASED	GROSS PAYMENT
		lbs	$
		lbs	$
		lbs	$
		lbs	$
		lbs	$

Table 6.b: Raw Crab Purchases, Western Aleutian Islands Golden (WAG) CR Fishery

CRAB SIZE	CRAB GRADE	RAW POUNDS PURCHASED	GROSS PAYMENT
		lbs	$
		lbs	$
		lbs	$
		lbs	$
		lbs	$

Table 6.c: Raw Crab Purchases, Bering Sea Tanner (BST) CR Fishery

CRAB SIZE	CRAB GRADE	RAW POUNDS PURCHASED	GROSS PAYMENT
		lbs	$
		lbs	$
		lbs	$
		lbs	$
		lbs	$

Table 6.d: Raw Crab Purchases, Bering Sea Snow (BSS) CR Fishery

CRAB SIZE	CRAB GRADE	RAW POUNDS PURCHASED	GROSS PAYMENT
		lbs	$
		lbs	$
		lbs	$
		lbs	$
		lbs	$

Table 6.e: Raw Crab Purchases, Bristol Bay Red (BBR) CR Fishery

CRAB SIZE	CRAB GRADE	RAW POUNDS PURCHASED	GROSS PAYMENT
		lbs	$
		lbs	$
		lbs	$
		lbs	$
		lbs	$

7. Vessel Costs

7.1 Costs for BSAI Crab Production Only

In Table 7.1, record the BSAI crab fishery operating costs for this vessel. These are costs that are incurred by this vessel solely in the BSAI Crab fisheries. Section 7.2 will ask for information on costs that cannot be tied exclusively to the BSAI crab fisheries. Include any taxes paid on the listed items (e.g. fuel tax, sales tax) in the totals.

a. Insurance Premiums (Hull, Property and Indemnity, and Pollution): if you paid a specific premium for operating in the BSAI Crab fisheries, record the cost here. Record insurance premiums that cannot be attributed just to crab fishing in Section 7.2. If you belonged to an insurance pool for the BSAI crab fishery, record the net costs of being in the pool (deposits into the pool minus any dividends received).

b. Insurance deductibles paid for accidents: include any insurance deductibles paid for accidents that occurred on the vessel. Exclude any repair or medical costs paid by the insurance claim (i.e., only list your out-of-pocket expense).

c. Crab pots purchased for use in BSAI crab fishery in the year: the total quantity and cost of crab pots purchased for the calendar year. List the city and state where the seller you bought these items from is located. Do not include repair and maintenance of pots (including rebuilding); these costs should be included in Section 7.2.

d. Line and Other Crab Gear Purchases: the total expense on line, floats, and other fishing gear other than pots used in BSAI crab fishing. List the city and state where the seller you bought these items from is located.

e. Bait used in BSAI crab fishery, by type: the total quantity (in pounds) and cost of bait (by species) used in each listed CR fishery during the calendar year. List the city and state where you bought the bait.

f. Fuel, Lubrication, and Fluids Used in BSAI Crab Fishery: record fuel purchases made for each of the BSAI CR fisheries. List the city and state where you purchased the fuel, the total quantity (**in gallons**) of fuel; and the purchase cost. Indicate in the check box if fuel purchase cost includes lubrication and fluids. Record fuel purchases in each fishery for the entire period in which you were fishing in, traveling to and from, and offloading from each CR fishery. Fuel cost includes fuel taxes.

g. Food and Provisions for Crew: the total cost of these items consumed and used by the crew. Include these costs even if all (or a portion) of them are taken out of the crews' share.

h. Other Crew Costs: list additional expenses for crew and the associated costs (for example, transportation costs, medical costs, payroll taxes, etc.)

i. Processing and Packaging Materials, Equipment, and Supplies: the total cost of processing supplies (gear, knives, gloves, boots, etc.) and packaging materials (such as banding or strapping material, shrink-wrap, pallets, etc.) purchased for processing BSAI crab products on this vessel in 2005. List the city and state where the seller you bought these items from is located.

j. Re-packing Costs: the total amount you spent to re-pack any of the BSAI crab products you processed on board this vessel during the year.

k. Broker Fees and Promotions for BSAI Crab Sales: the sum of all fees paid to brokers for sales and promotion in each CR fishery for the 2005 calendar year.

l. Crab Landing and Sales Taxes and Fees: record the sum of all state and local fish taxes (e.g., Alaska fisheries business tax, local landing tax, cost recovery and buyback tax, arbitration assessment, and others) you paid for landing and sales of BSAI crab. These taxes and fees were included in the FOB Revenues recorded in Section 2.

m. Storage, Wharfage, and Delivery: the total storage, wharfage and delivery costs for pots and other equipment used aboard this vessel in the crab fisheries.

n. Observer Costs: record the sum of all observer fees paid in each CR fishery for the year.

o. Freight and Handling Costs for Processed Crab Products from the Vessel: record the freight and handling costs you incurred during the sale and delivery of processed crab products during the year. If storage costs were incurred while shipping these products, include the costs here and do not include them in "p. Product Storage."

p. Product Storage: record the total cost of storing processed BSAI crab products during the year.

q. Fishing Cooperative Costs: record the total cost to you for this vessel's participation in a BSAI crab fishing cooperative. Exclude any monies paid to purchase or lease crab ITQ. List only the costs associated with membership or operating costs of the cooperative.

r. Other Crab-specific Costs: list additional expenses incurred for BSAI Crab fishing and the associated costs (for example, association/marketing fees, IPQ Lease costs, vessel communication costs, vessel leasing costs, pot truck fees, accounting fees, vessel moorage during the crab fishery, overage fines, etc.)

Table 7.1: Costs for BSAI Crab Production Only

COST CATEGORY		TOTAL COST
a. Insurance Premiums (Hull, Property and Indemnity, and Pollution)		$
b. Insurance deductibles paid for accidents in 2005		$
c. Crab pots purchased for use in BSAI crab fishery in the year		
City and State	Quantity	$
City and State	Quantity	$
City and State	Quantity	$
d. Line and other crab gear purchases		
City and State:		$
City and State:		$
City and State:		$

COST CATEGORY		TOTAL COST
e. Bait used in BSAI Crab Fishery, by type		
CR Fishery Code: **EAG**	City and State:	
Bait Species	Pounds:	$
Bait Species	Pounds:	$
Bait Species	Pounds:	$
CR Fishery Code: **WAG**	City and State:	
Bait Species	Pounds:	$
Bait Species	Pounds:	$
Bait Species	Pounds:	$
CR Fishery Code: **BST**	City and State:	
Bait Species	Pounds:	$
Bait Species	Pounds:	$
Bait Species	Pounds:	$
CR Fishery Code: **BSS**	City and State:	
Bait Species	Pounds:	$
Bait Species	Pounds:	$
Bait Species	Pounds:	$
CR Fishery Code: **BBR**	City and State:	
Bait Species	Pounds:	$
Bait Species	Pounds:-	$
Bait Species	Pounds:	$

f. Fuel, lubrication, and fluids used in BSAI Crab fishery

CR Fishery Code	City and State	Fuel Quantity (gallons)	Cost includes lube/fluids	Total Cost
EAG			❒ Yes ❒No	$
WAG			❒ Yes ❒No	$
BST			❒ Yes ❒No	$
BSS			❒ Yes ❒No	$
BBR			❒ Yes ❒No	$

COST CATEGORY	TOTAL COST
g. Food and provisions for crew	$
h. Other crew costs (describe below)	
	$
	$
	$
i. Processing and Packaging Materials, Equipment, and Supplies	$
j. Re-packaging Costs	$
k. Broker Fees and Promotions for BSAI Crab Sales	$
l. Crab landing and sales taxes and fees	$
m. Storage, wharfage, and delivery	$
n. Observer costs, by fishery	$
CR Fishery Code: **EAG**	$
CR Fishery Code: **WAG**	$
CR Fishery Code: **BST**	$
CR Fishery Code: **BSS**	$
CR Fishery Code: **BBR**	$
o. Freight and Handling Costs for Processed Crab Products from the Vessel	$
p. Product Storage	$
q. Fishing Cooperative Costs:	$
r. Other crab-specific costs (Specify below)	
	$
	$
	$
	$
	$

7. Vessel Costs

7.2 Annual Vessel Costs

In Table 7.2, please record all of the following costs that were incurred for your vessel during the 2005 calendar year. Indicate if these costs were incurred for the BSAI crab fishery only by checking "Yes" under "Crab-only Cost". Otherwise, check "No" and these costs will be averaged out over *all* your crab and non-crab activities during the year.

a. Investments in Vessel, Gear and Equipment: Record the total cost of improvements or investments in vessel, gear and equipment for the year. This includes the costs of all assets that were purchased in 2005 and will be depreciated for tax purposes. List the city and state where the seller you purchased the improvements from is located. Exclude standard repairs and purchases that are necessary to conduct operations.

b. Repair and Maintenance (R&M) for Vessel, Gear, and Equipment: Record the repair and maintenance expenses for maintaining this vessel and repairing mechanical and physical problems with the vessel or equipment (exclude investment expenditures included in item 7.2a). List the city and state where the business or person providing the repair and maintenance work is located. Exclude expenses or repairs that result solely from non-crab fisheries. Do not include salaries of employees whose job is to perform R&M (include these costs in item 7.2.c).

c. Number of employees and salaries for foremen, managers and other employees: Record the number of any additional vessel employees and the total payment for wages and salaries not included in direct labor costs reported in Section 4.

d. Insurance Premiums (Hull, Property and Indemnity, and Pollution): Record the total costs of your annual insurance premiums for this vessel.

e. Other Vessel-specific Costs: Record any other significant cost(s) that were incurred in order to harvest or process crab in the 2005 calendar year that were not included in Table 7.1 or elsewhere in Table 7.2). Please specify the nature of the expense(s). Do not list costs of permits or licenses.

Table 7.2 Annual Vessel Costs

COST CATEGORY	TOTAL	CRAB ONLY COST
a. Investments in Vessel, Gear and Equipment		
City and State:	$	❒ Yes ❒ No
City and State:	$	❒ Yes ❒ No
City and State:	$	❒ Yes ❒ No
b. Repair and Maintenance for Vessel, Gear and Equipment		
City and State:	$	❒ Yes ❒ No
City and State:	$	❒ Yes ❒ No
City and State:	$	❒ Yes ❒ No
d. Salaries for foremen, managers and other employees not included in direct labor costs reported in Section 3	$	❒ Yes ❒ No
No. of Employees:		
d. Insurance Premiums (Hull, Property and Indemnity, and Pollution)	$	❒ Yes ❒ No
e. Other Vessel-specific Costs (describe below)		
	$	❒ Yes ❒ No
	$	❒ Yes ❒ No
	$	❒ Yes ❒ No

8.0 Annual Totals for All Fisheries

Please record the total sum for the calendar year for processing days, days at sea, FOB Alaska/Seattle Revenues, finished pounds processed, pounds retained and labor costs for all your fishing activities during the calendar year. Be sure to include participation in all fisheries, **including activities other than BSAI Crab fishing (i.e., ground fish, chartering, tendering, etc**). Indicate Alaska or Seattle (check one) as your FOB port.

		TOTAL
Processing Days		
Days at Sea		
FOB Revenues	❒ Alaska ❒ Seattle	$
Finished Pounds Processed		
Round Pounds Caught (exclude discards)		
Labor Costs*		$

*Include only the direct compensation made to the crew, processing labor, and captain, as in Section 4 Exclude salaried employees.

This page intentionally blank.

This page intentionally blank.

Revised: 8/14/2006

OMB control No. xxxx-xxxx
Expiration Date: xx/xx/xxxx

Non-AFA Trawl
CATCHER/PROCESSOR
ECONOMIC DATA REPORT (EDR)

CALENDAR YEAR 200X

This form can be downloaded from
http://www.fakr.noaa.gov

PUBLIC REPORTING BURDEN STATEMENT

Public reporting burden for this collection of information is estimated to average X hours per response, including time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden to Assistant Regional Administrator, Sustainable Fisheries Division, NOAA National Marine Fisheries Service, P.O. Box 21668, Juneau, AK 99802-1668.

ADDITIONAL INFORMATION

Before completing this form, please note the following: 1) Notwithstanding any other provision of law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number; 2) This information is mandatory and is required to manage commercial fishing efforts for groundfish under section 402(a) of the Magnuson-Stevens Act (16 U.S.C. 1801, *et seq*.); 3) Responses to this information request are confidential under section 402(b) of the Magnuson-Stevens Act (16 U.S.C. 1801, *et seq*.). They are also confidential under NOAA Administrative Order 216-100, which sets forth procedures to protect confidentiality of fishery statistics.

ANNUAL CATCHER/PROCESSOR EDR

This report collects information on Bering Sea and Aleutian Islands Management Area (BSAI) Non-AFA Trawl Catcher Processor Sector, including Western Alaska Community Development Quota Program (CDQ) non-Pollock groundfish fisheries. The fisheries are referred to as Amendment 80 fisheries (AM80 fishery). Pursuant to the legislation, the data and identifiers will also be used for program enforcement and determination of qualification for cooperative membership. Consequently, identifiers and data will be disclosed to NOAA Enforcement, NOAA General Counsel, the Antitrust Division of the Department of Justice, the Federal Trade Commission, and NOAA Restricted Access Management Program.

You have received this form because our records show that you are either the owner of a catcher/processor that participated in the AM80 fishery in the past or were leased a catcher/processor that participated in the AM80 fishery in the past. **You are required to submit the Certification Pages (pages 5 and 6) and any additional information requested in the Economic Data Report (EDR). Failure to submit an EDR form when required will result in delay in and/or acceptance of any and all permit applications**.
If YOUR label address is incorrect or missing, please correct the error on the label or print your permanent name and address here.

Catcher/processor Name
Company Name
Street address or P.O. Box Number
City, State, and Zip Code

NOTE

Any owner or leaseholder of a catcher/processor during any period in the calendar year identified on the EDR in which the catcher/processor was used to process groundfish in the AM80 fishery must submit to the DCA, at the address provided on the form, an EDR for a catcher/processor.

Definition of "Leaseholder": For the purpose of defining the persons responsible for submitting the EDR, a Leaseholder is a person, other than the owner of the catcher/processor for which the EDR is required, who: was identified as the leaseholder, in a written lease, of the catcher/processor, **OR** paid expenses of the catcher/processor, **OR** claimed expenses for the catcher/processor as a business expense on schedule C of his/her Federal Income Tax Return, or on a State Income Tax Return.

Mail or FAX Certification Pages or Entire EDR by XXXX, 200X to:

Pacific States Marine Fisheries Commission
205 SE Spokane, Suite 100
Portland, OR 97202
FAX Number: 503-595-3450

For more information or if you have questions,
please call toll free 1-877-741-8913

CERTIFICATION PAGE – 1 of 3

This is a **required form**. Provide all information requested below.

Catcher/Processor Information	
Catcher/Processor Name	ADF&G Processor Code
	Federal Fisheries Permit Number
USCG Documentation Number	Groundfish License Limitation Permit Number(s)
Current Estimated Market Value of Vessel and Equipment ($)	Replacement Value of Vessel and Equipment ($)
Name of Amendment 80 Cooperative (if applicable)	

Owner Information	
Name of company, partnership, or sole proprietorship	
Business Telephone Number	Business FAX Number
Business E-mail address, if available	

Leaseholder Information (if applicable)	
Name of company, partnership, or sole proprietorship	
Business Telephone Number	Business FAX Number
Business E-mail address, if available	

NOTE: Any owner or leaseholder may appoint a designated representative to respond to questions in the EDR. The designated representative is the primary contact person for the DCA on issues relating to data required in the EDR.

Person Completing this Report (check one)

❒ Owner (If your name and address are the same name and address provided in the Owner Information block above, the information does not need to be repeated here)

❒ Leaseholder (If your name and address are the same name and address provided in the Leaseholder Information block above, the information does not need to be repeated here)

❒ Designated Representative (complete information below)

Name	Title
Business Number Telephone	Business FAX Number
Business E-mail address (if available)	

CERTIFICATION PAGE – 2 of 3

Select one of the following statements and provide any requested information. Check one box below.

<table>
<tr><td colspan="2">1. You are the catcher/processor owner, and you processed BSAI non-Pollock groundfish in the above described vessel during the 2005 calendar year.

Complete and submit Entire EDR for the 2005 calendar year.</td></tr>
<tr><td colspan="2">2. You are the catcher/processor leaseholder, you processed BSAI non-Pollock groundfish in the above described vessel during the 2005 calendar year.

Complete and submit Entire EDR for the 2005 calendar year.</td></tr>
<tr><td rowspan="4">3. You are the catcher/processor owner, and you leased the above described vessel for a portion of the year to another party, and processed some BSAI non-Pollock groundfish in the above described catcher/processor during the 2005 calendar year.

Provide the name, address, and telephone number of the person to whom you leased the vessel during the 2005 calendar year.

Complete and submit Entire EDR for the 2005 calendar year.</td><td>Leaseholder Name</td></tr>
<tr><td>Street address or P.O. Box</td></tr>
<tr><td>City, State, and Zip Code</td></tr>
<tr><td>Telephone No. (include area code)</td></tr>
</table>

CERTIFICATION PAGE – 3 of 3

4. You are the catcher/processor **owner**, you leased or sold the above described vessel to another party, and processed no BSAI non-Pollock groundfish in the above described vessel during the 2005 calendar year, Provide the name, address, and telephone number of the person to whom you leased or sold the vessel during the 2005 calendar year. **OR** You are the catcher/processor owner and the vessel was lost or rendered permanently inoperable due to accident, and processed no BSAI non-Pollock groundfish in the above described vessel during the 2005 calendar year, **Indicate status of vessel:** **Leased Sold Lost** **Complete and submit the EDR Certification Pages only.**	Leaseholder Name Street address or P.O. Box City, State, and Zip Code Telephone No. (include area code)

5. You are the catcher/processor **owner**, and no one processed BSAI non-Pollock groundfish in the above described catcher/processor during the 2005 calendar year. **Complete and submit the EDR Certification Pages only.**

Sign and date the appropriate box below:

If you checked **Box 1, Box 2, or Box 3** above, **SUBMIT ENTIRE EDR INCLUDING CERTIFICATION PAGES. Sign in the space below.**

I certify under penalty of perjury that I have reviewed all the information in this report and that it is true and complete to the best of my knowledge.

Signature	Date signed

If you checked **Box 4 or Box 5** above, **DO NOT SUBMIT ENTIRE EDR – SUBMIT ONLY THE CERTIFICATION PAGES. Sign in the space below.**

I certify under penalty of perjury that I do not meet any of the conditions required under statements 1, 2, or 3 above to submit an entire EDR.

Signature	Date signed

Instructions for Completing Questionnaire

This questionnaire is designed to collect information on individual vessels even if the vessel is part of a larger company. The intent is to evaluate each vessel as a stand-alone entity. If this vessel is part of a larger company with multiple vessels or other operations we request that you report only costs and revenues that are allocated to this vessel. **All of the following questions pertain to calendar year 200X.**

Section 1: Vessel Characteristics and Operation in Calendar Year 200X ‘

1.1 Please verify or correct the following information about this vessel.

If all of the information in the table below is correct, please check (✓) this box ☐.

Item	(1) Information on Record	(2) CORRECTIONS or ADDITIONS
a. Vessel Name	[provide info we have]	
b. USCG Vessel ID	[provide info we have]	
c. ADF&G Vessel ID	[provide info we have]	
d. Home Port	[provide info we have]	
e. US Gross Registered Tonnage	[provide info we have]	
f. Net Tonnage	[provide info we have]	
g. Length Overall	[provide info we have]	
h. Beam	[provide info we have]	
i. Shaft Horsepower	[provide info we have]	
j. Fuel Capacity (US gal.)	[provide info we have]	
k. Year Built	[provide info we have]	

1.2. Vessel Survey Value

a. What was the most recent survey value, rounded to the nearest 100 dollars, of the vessel and equipment (fair market value)?

$US _____ SURVEY VALUE (FAIR MARKET VALUE)

b. What was the date (mm/dd/yyyy) of this vessel's last value survey?

____/____/_____ DATE OF LAST VALUE SURVEY
mm dd yyyy

c. Did the survey value given above reflect the value of permits and moratorium qualifications associated with the vessel at the time of the value survey?

1 YES 2 NO

d. Did the survey value given above reflect the value of processing equipment on the vessel at the time of the value survey?

1 YES 2 NO

1.3 Freezing Capacity:

a. How much freezer space (measured in pounds of product) did the vessel have at the beginning of calendar year 200X (round to the nearest 100 pounds)?

_____Lbs.

b. What is the maximum freezing capacity of this vessel in pounds per hour?

_____Lbs/hour

1.4 Processing Capacity: In the table below, for each type of processing line on the vessel, record the following information:

a. Product processed - Record each type of product processed on the line in the AM80 fishery

b. Number of lines – record the number of processing lines of similar type (equipment and/or product mix)

c. Throughput – record the vessel's maximum average throughput in pounds (round weight) per hour under normal operating conditions (assuming quantity of raw fish and other inputs is not limiting), totaled over all processing lines of this type.

Products processed	Number of Processing Lines	Maximum throughput per hour

1.5 For each of the following activities please give the vessel's average fuel consumption per hour during calendar year 200X. If not applicable please write "NA".

ACTIVITY	**GALLONS OF FUEL PER HOUR**
a. Fishing and processing flatfish	
b. Steaming - fully loaded with product	
c. Steaming - empty	

1.5 Vessel activity during 200X:

ACTIVITY	**AM80 Fishery**	**All Other Fisheries**
Fishing		
Processing		
Traveling (steaming empty) or offloading		
Laid up or in shipyard		

Section 2: Harvest Quota Transfers

2.1 In the table below, for each transaction in which you **transferred** harvest quota or other tradeable allocated fishing **to** another qualified vessel, record the date of the transaction (date of the written or verbal contract), the type of fishing right (AM 80 rock sole quota shares, king crab PSC, etc), the amount of the allocation transferred in pounds, and the total payment you received. If the transaction involved an in-kind trade (rock sole shares for halibut PSC), describe that asset you received in the trade (including the quantity) as the price.

Table 2.1: Transfers of Tradeable Fishing Rights to Other Vessels

Date of Transaction	Type of allocation	Total Pounds	Total Price

2.2 In the table below, for each transaction in which you **acquired** harvest quota or other tradeable allocated fishing **from** another qualified vessel, record the date of the transaction (date of the written or verbal contract), the type of fishing right (AM 80 rock sole quota shares, king crab PSC, etc), the amount of the allocation acquired in pounds, and the total amount you paid. If the transaction involved an in-kind trade (rock sole shares for halibut PSC), describe that asset you gave in the trade (including the quantity) as the price.

Table 2.2: Acquisition of Tradeable Fishing Rights from Other Owners

Date of Transaction	Type of allocation	Total Pounds	Total Price

Section 3: Calendar 200X Revenues

3.1 Please give the total amount of revenue received from all sources for each of the following categories during calendar year 200X (rounded to the nearest 100 dollars). Do not include revenues received from leasing out fishing quota or other harvest rights described in Section 2.1.

REVENUE CATEGORY	Units	$Revenue
a. Total fishery product sales volume and revenue (including custom processing and sales of inventory produced prior to this year)	lbs	$
b. All other income derived from vessel operations (e.g., tendering, charters, cargo transport, etc.)		$
c. Income derived from sale or lease of fishery licenses normally associated with this vessel		
Sale of LLP License(s)	LLP#	$ Revenue
	#	$
	#	$
	#	$

Section 4: Calendar Year 200X Expenditures and Materials Usage

4.1 Capital Expenditures

Please give the calendar year 200X **capital expenditures** associated with each of the following categories for this vessel. Round all answers to the nearest 100 dollars.

CAPITAL EXPENDITURE CATEGORY	TOTAL CAPITALIZED EXPENDITURE(US $)	
a. Fishing gear (nets, net electronics, doors, cables, etc.)	$	
b. Expenditures on processing equipment	$	
c. Expenditures on product storage equipment	$	
d. Expenditures on vessel and on-board equipment (other than fishing, processing, or storage equipment)	$	
e. Other capital expenditures related to vessel operations	$	
f. Purchase of LLP License(s)	LLP#	Cost
	#	$
	#	$
	#	$

4.2 Expenses

In the table below, please provide the total calendar year 200X expenses (before income tax) associated with the following categories. Do not include expenditures that were capitalized and listed in question 3.1. Round all answers to the nearest 100 dollars. Do not include costs of acquiring fishing quota or other harvest rights described in Section 2.2.

EXPENSE CATEGORY	Total Cost
a Processing labor expenses (including bonuses and payroll taxes but excluding benefits and insurance)	$
b. Labor expenses for all other employees on board the vessel (including bonuses and payroll taxes but excluding benefits and insurance)	$
c. Technicians (on board)	$
d. Food and provisions (not paid by crew)	$
e. Recruitment, travel, benefits and other employee related costs (excluding food and provisions and other employee costs already provided in items a. and b.)	$
f. Lease expenses for this vessel and all on-board equipment	$
g. Fishing gear leases, repairs and purchases fully expensed in calendar year 200X (e.g., nets, net electronics, doors, cables, etc.)	$
h. Repair and maintenance expenses for vessel and processing equipment (including shipyard accrual and all purchases of parts and equipment that were expensed in calendar year 200X)	$
i. Freight, storage, and other sales costs for non-FOB sales	$
j. Freight and storage cost other than for products (e.g., gear, supplies, etc.)	$
k. Product packaging materials	$
l. Fuel and lube $	
m. Observer fees and other fishery monitoring and reporting costs	$
n. Cooperative costs including lawyer and accountant costs, association fees, and other fees charged to you by the harvest cooperative.	$
o. General Administrative Cost including professional services and management fees (do not include costs reported in line m or n)	$
p. Insurance (vessel insurance, P&I, and other insurance associated with the operation of this vessel)	$
q. Interest payments	$
r. Depreciation and Amortization	$
s. Capital Construction Fund (CCF) contributions	$
t. Fisheries landings taxes	$
u. Total raw fish purchases from other vessels	lbs $
v. All other expenses not included in this table (excluding capitalized expenditures)	$

Section 5: Calendar Year 200X Labor

5.1 Please provide the average number of processing positions and the average number of all other positions **aboard** this vessel while fishing and processing during the 200X calendar year. The sum of the number of positions should equal the total number of employees aboard the vessel (on average).

Labor category	Average number of positions on board	Number of employees in 2006
a. Fishing		
b. Processing		
c. Other		

5.2. On average, how many hours per day did a typical processing line employee work during calendar year 200X? _____Hours

5.3 Did the vessel use a crew or revenue share system to pay processing or non-processing crew in calendar year 200X? (C*ircle one number for each*)

	YES	NO
a. To pay <u>some</u> processing crew	1	2
b. To pay <u>all</u> processing crew	1	2
c. To pay <u>some</u> non-processing crew	1	2
d. To pay <u>all</u> non-processing crew	1	2

Appendix 3 to Data Collection Discussion Paper – October 2006

Improved Data Collection in AK Fisheries

This appendix discusses the baseline level of information required to estimate many commonly used economic indicators that may be used to estimate the effects of changes in fishery management. For purposes of the following discussion, a summary of potential performance measures used to analyze the effects of management actions, and associated data requirements is provided in Table 1. The left-hand column of the table lists a number of performance measures, which we describe in what follows. The second column, labeled "metric," summarizes how each performance measure is typically calculated. The remaining columns summarize the minimum data required for each performance measure; for some of the measures that are often computed with different types of models, the table indicates the information required for each of the various approaches. The table also identifies additional data elements (denoted by an "M" in each row) that may be utilized within each model to either add structure and robustness to economic models[1] or to help to quantify the impacts of regulatory policies and market fluctuations.

As can be seen from the table, different performance measures imply different data requirements. However, nearly all of the measures in Table 1 require ex-vessel or plant level revenue data, depending on whether one's focus is on harvesting or processing activity, respectively. Similarly, many of the measures in Table 1 also require one to specify the set of outputs at the vessel or plant level. For harvesting activities the outputs to include are the various species caught by vessels sharing a similar technology, while in processing the outputs are the product forms produced from each species. Although ex-vessel and plant output and revenue data are consistently collected throughout Alaskan fisheries, the lack of information on costs associated with fishing render a majority of the performance measures impossible to estimate.

Variable cost data are also required for many of the measures, and are not currently collected in any Alaskan fisheries (except BSAI crab). Without cost data one cannot obtain a full view of costs *and* benefits. For example, when we integrate variable cost data into models of fisher behavior we can estimate the impacts that proposed spatial closures have on different fisheries, vessels, or communities. Variable costs are those costs incurred when purchasing variable inputs such as labor, fuel/energy, and "materials." Although the materials used in harvesting are somewhat fishery specific, they usually include bait, gear (such as line, nets, or pots), and ice; standard processing materials include product packaging and additives.

Many of the measures in Table 1 also require some measure of the capital stock. For vessels the capital stock may be proxied by the value of the vessel and equipment onboard, or more commonly, by vessel characteristics (such as length, tonnage, or horsepower). However, it is unlikely that such crude measures will accurately characterize the underlying productive capital base – especially in an era in which technological advancements play such a large role in a vessel's ability to target and harvest fish (e.g., sonar, route tracers, global positioning systems, and onboard computers). It can

[1] These benefits come in the form of being able to also estimate the "envelope" equations that may be obtained through Shepard's or Hotelling's lemma (which essentially state that one can obtain conditional input demand equations, output supply equations, or both, by partially differentiating a cost, revenue, or profit function, respectively). By estimating these equations along with the cost, revenue, or profit function, one obtains additional degrees of freedom and a heightened ability to identify parameters econometrically.

be even more difficult to quantify the capital stock for plants, as the size of the plant will rarely be an accurate representation of the processing, freezing and storage equipment within it. Similarly, the value of the plant may reflect other assets on site, such as worker accommodations (boarding facilities, cafeterias, etc.). Thus, additional information on vessel capital is required.

Unfortunately, the only economic data that has been historically collected in the North Pacific fisheries on a systematic basis at the ex-vessel level are landings, revenues, and vessel characteristics such as length, tonnage, and horsepower.[2] Processing records are limited to weekly production reports for groundfish (indicating product volume and value) and the annual commercial operators' annual report that includes annual sales and value information for all species. This does not provide the temporal resolution to construct market models or utilize the more temporally disaggregated information on landings and effort that is currently collected.

Therefore, a general template for additional data collection in the North Pacific fisheries could comprise the following information: 1) Vessels: days at sea; crew size, earnings and residence; leases of IFQ; costs of insurance, gear (e.g. pots, line, hooks and trawls), bait, fuel, lubrication, food and provisions, freight, storage, federal observers, taxes, improvements in vessel, gear, and equipment, repair and maintenance, and vessel overhead. 2) Plants: processing days and processing positions; total man-hours devoted to processing; total labor payment to, and residence of, processing workers; annual sales by volume, value, size, and grade for each product; costs of fish taxes, packaging materials, food, insurance, freight and storage, fuel, electricity, lubrication, improvements in plant, repair and maintenance, salaries to foremen and plant managers; and other plant overhead.

In most cases the collection of this information will allow analysts to construct all of the measures given in Table 1, except for those involving measures of profit, and assets and liablilities. This limitation arises because one must have information on the entire scope of a business, not just at the plant or vessel level, to make such inferences.

Choosing the Unit of Analysis

Many of the economic performance measures in this discussion focus on the production process at the level of the vessel or plant. Examples include measures of capacity utilization, productivity, and various notions of technical or allocative efficiency. Such measures may be of particular interest when assessing the effects of management measures such as rationalization programs. Focusing on the production process at the level of the vessel or plant allows the analyst to identify the link between inputs used to catch or process fish and the quantity of fish or product forms obtained, respectively. Characterizing this link, and how it changes, is a key part in assessing the changes in economic performance that arise under changes in fishery management. However, because the production activities of one vessel or plant may be only one component of a firm's overall business structure, instances arise in which the firm (which may own one or more vessels, plants, or both) is the natural unit of observation.

Analyzing the performance of a firm often necessitates a different set of tools, many of which are grounded in the finance and accounting literature. These measures focus on the revenue, costs, debt, and equity of the firm, which may be thought of as capturing the "overall" performance of the

[2] Landings and revenues are recorded by the State of Alaska on "fish tickets", and fuel prices are recorded on a weekly basis by the Pacific States Marine Fisheries Commission.

firm's plants and/or vessels. However, such measures also include the effect of factors outside of a firm's discretion, such as market changes that affect input or output prices. For this reason, both the microeconomic measures and financial measures, to be discussed in more detail below, provide important and different information about the well-being of a firm and the way in which it is affected by fishery management. Although this discussion does touch on methods for estimating the performance measures, we have chosen to omit many of the details on model specification due to their ubiquity, and because it is beyond our scope.

In addition to the data required to construct measures of plant or vessel performance, as summarized in Table 1, evaluating firm performance requires ownership data to link together the various production units of the firm. These links are often not immediately clear as different vessels and plants operated by a firm may each be set up as individual companies. These data also allow analysts to monitor structural changes not reflected directly in microeconomic- or financial-based measures, such as changes in the concentration of domestic and foreign ownership in the harvesting and processing sectors, the structure of ownership (e.g., proprietorships, publicly traded corporations and privately held corporations), and the relationships within and among firms, (i.e., the amount and nature of vertical and horizontal integration).

Profits, Revenues and Costs

Although it is rarely the sole focus, increasing the overall profitability of the fishery and increasing the rents derived from it is a fundamental reason for changes in fishery management. In particular, rationalization programs are expected to increase profitability in a number of ways, including reducing fixed costs of capital due to consolidation, increasing vessel and plant efficiency, and increasing product quality. There are a variety of ways to measure and decompose changes in profitability, depending on data availability.

When vessel or plant records of profits, revenues or costs are unavailable, they may be estimated econometrically using data on input or output quantities or shares and input and output prices (by Shephard's Lemma, discussed in footnote 1 above). They can also be inferred by estimating a production function and deriving the associated profit, cost or revenue function using standard results from duality theory, although this approach has rarely been employed in fisheries. Both of these methods require one to assume that firms maximize revenues or profits, or minimize costs of producing a given level of output.

When cost-earnings data are available through direct survey data, one is able to construct more straight-forward and understandable measures of profitability (as the analyst may directly observe economic performance in various areas for the periods before and after a management change in order to evaluate the likely effects). For this reason, systematic cost-earnings data collection protocols are the most promising means of understanding the effects of fishery management changes. However, it should be noted that even with detailed records on costs and revenues in both periods it can be difficult to determine which changes should be attributed to a management action and which are caused by changes in catch (production) levels, variable input use, input or output prices, fixed costs, or fish stocks. Furthermore, a simple accounting approach may give little indication about how things may change in the future (since no behavioral or statistical model is estimated).

Therefore, in order to better predict or explain observed variations in profits, costs, or revenues, it may be useful to construct models to estimate directly the relationship between them and factors

such as prices, production choices, fixed inputs, productivity, and changes to natural capital (fish availability). Various parametric and non-parametric dual approaches for utilizing cost-earnings data have been developed and applied in the fisheries literature. The most commonly utilized dual approaches in fisheries are econometric revenue, profit and costs functions. These models have the benefit of accommodating multiproduct harvesting or processing platforms and facilitating tests of statistical significance. Economists have also developed index-number techniques that can decompose changes in profits into components attributable to output prices, variable input prices, fixed inputs, productivity, and stock levels.

Duality-based profit, cost, or revenue functions may also be useful for constructing other performance measures (e.g., capacity utilization, productivity, and efficiency). However, as discussed below, these functions rely on a number of assumptions that may be invalid in some cases and the practitioner must use professional judgment and knowledge of the fishery under study to select the most appropriate framework for analysis.

Some Caveats for Dual Models

One factor that should be considered when estimating any dual model in a fishery application is whether the underlying behavioral assumptions are consistent with the incentives inherent to that particular fishery. Dual models assume that firms choose inputs and/or outputs in accordance with a particular rationale such as revenue or profit maximization, or cost minimization.

Under management institutions in which fish are harvested competitively (and "Olympic" style fishery), as has been the case with a majority of the Alaskan fisheries, fishers are more likely to attempt to maximize catch or revenues than minimize the cost of catching a given level of fish. However, when fishing rights are assigned, cost minimization (which assumes firms minimize the cost of landing a specified level of catch) or profit maximization (which assumes firms jointly choose minimize input costs and maximize revenue [through, say, quota acquisition and targeting strateiges] to maximize profit) are more realistic assumptions. Cost minimization is more likely when there are restrictions on trading quota or limits on the amount of quota one may obtain, while profit maximization may be more appropriate when fishers are free to choose whatever catch (output) combination they desire.

It should be noted that vertical and horizontal integration may also compartmentalize the actions of individual vessels or plants to fit into a larger organizational optimization plan, causing each agent's isolated objectives to differ from standard assumptions. Annual variations in stock abundance and inventories may also dictate the production decisions of plants or vessels, leading to complex dynamics that aren't adequately addressed in standard, static dual models.

Another factor that may influence production decisions is participation of vessels and/or floating processors in other fisheries. For example, a company may own a processing vessel that processes a particular species not because this is a profitable activity in itself but rather because it is a way to get some use out of the vessel when it is not processing other more profitable species. Put another way, how companies participate in one fishery is typically a function of the other opportunities that exist.

An implication of these considerations is that the correct behavioral model may change over time as regulations change. Therefore, when using multiple years of data one should be careful that the underlying behavioral model is appropriate for the entire period, or one may instead need to specify

different behavioral models for different regulatory regimes. This is especially important to consider when one is attempting to isolate the effects of regulatory changes, and may make the process of identifying the impacts more difficult.

Financial Performance Measures

There are a number of measures commonly used in the private sector to assess the financial performance of firms. These measures generally rely on direct estimates of revenues, costs and profits as well as information about assets and liabilities. The simplest performance measure to calculate is gross revenues, which is collected in all AK fisheries. Gross revenues, however, provide a limited measure of economic performance when analyzed in isolation. For example, changes in revenues may be offset by changes in costs leaving net benefits unchanged.

Therefore, it is much more informative to track net profits, defined simply as gross revenues minus all fixed and variable costs. When vessels participate in multiple fisheries, one might also be interested in computing net profits by fishery (although fixed costs must be apportioned by fishery, which can be problematic). Measures such as return on revenues (net profit divided by total revenues), return on the resource (net profit divided by TAC, steady-state biomass, or tons caught), or return on capital (net profits divided by the value of the capital stock) are also interesting as they can be used, albeit informally, to assess the economic efficiency of the industry in utilizing the resource and capital. Other than estimating the value of capital, these measures should not require any more information then is already required to calculate net profit.

A number of other financial ratios are commonly used to assess the health of a firm. One notable measure is the net capital ratio, given by the ratio of total assets to total liabilities. A net capital ratio that exceeds one implies that a liquidation of the business would provide enough cash to cover outstanding liabilities. Another important financial ratio is the current ratio (current assets /current liabilities). A rule of thumb in many industries is that a healthy firm should have a current ratio greater than two. However, for the fishing industry a current ratio around one is more common. These measures provide information about the ability of the firm to remain solvent and meet financial obligations in the short term. While these ratios are certainly correlated to the financial performance of the firm, they are not comprehensive indicators of financial performance.

Another measure that may be useful as a barometer of industry profitability is inventory levels. Rising inventory levels are often a sign of falling demand or prices, which may put downward pressure on profit (falling inventories may give the opposite indication). In sum, it is important to track a variety of these financial measures, as each measure only provides a partial indication of overall economic performance (or how performance has changed).

It should be clear at this point that an “accounting” based analysis of financial performance requires slightly different information than analyses based on microeconomic models of harvesting and processing. Thus, any data collection program should be developed in order to facilitate the resultant measures of interest.

Dealing with Fixed Costs

The two previous sections have discussed performance measures based on profit data. A variety of factors can complicate estimation of profits and make it difficult to understand how they were affected by management actions. Perhaps the most difficult factor to deal with is when vessels or plants harvest or process fish from multiple fisheries, and annual fixed costs and capital costs must

be apportioned across production activities. Apportioning fixed costs among these fisheries will influence apparent profitability heavily, and the choice over apportioning methods is necessarily arbitrary. While there are good reasons to justify different methods (e.g., by raw weight or value, by finished product weight or value, or according to labor costs), there is no standardized approach. With capital costs there is the added problem of choosing a method to depreciate the overall level (in addition to allocating such costs among fisheries). Common methods include straight line depreciation, perpetual inventory methods, or some percentage of market value of the capital; again, the method used is likely to differ among firms.

One way to avoid issues associated with fixed costs is to look solely at quasi-rents (revenues less variable costs). This approach was used recently by Matulich and Clark (2003) in their analysis of the Alaska halibut and sablefish ITQ program. Such a focus eliminates accounting for fixed costs that cannot be easily allocated to a specific vessel or plant (or solely to harvesting or processing of a particular species), and must be arbitrarily apportioned across several vessels or plants. Note, however, that while data on non-variable costs (such as capital expenditures) is not required to compute quasi-rents, it may be required to *understand* changes in quasi-rents.

Capital expenditures (such as new equipment or upgrades to plants or vessels) 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 capital equipment, without information on those fixed costs the analyst would overstate the cost efficiencies afforded by a particular management change. Similarly, there can be pitfalls in interpreting changes in variable costs as indicators of fishery performance. For example, if the fleet started producing a higher quality product at a higher cost (such as in recently rationalized Alaskan pollock fishery, where vessels have decreased haul sizes and slowed daily catch levels to improve product quality), increased costs should not be interpreted as a sign of decreased efficiency.

Harvesting and processing capacity and capacity utilization

Excess fishing capacity, with its associated problems, is a standard outcome of regulated open access fisheries and is frequently the impetus for management actions. This was clearly the case for the BSAI crab fisheries, as well as for the Alaskan halibut and BSAI pollock fisheries that were rationalized previously. In an open access fishery, capacity builds as new vessels enter the fishery to capture a share of the rents until all rents are dissipated. Even if entry is subsequently curtailed, through provisions such as license limitation programs, the problem is often compounded as vessels' catching power is increased in an attempt to capture a larger share of the dwindling economic rents. In fisheries where heightened fishing pressure leads to short seasons, processors will also often invest in capacity in order to accommodate a larger share of the landings. The result is a group of plants that are well suited to process a seasonal glut, but may sit idle or under-utilized for other parts of the year. A primary area in which rationalization may improve fishery performance is by reducing fishing and processing capacity and increasing capacity utilization of remaining participants. Table 1 highlights the information required to construct measures of capacity and capacity utilization.

Productivity

Productivity measurement essentially involves analyzing the quantity of inputs required to produce a unit of output. The inputs included in the model should consist of those that directly contribute to the quantity of output one can produce (the details on the relevant inputs and outputs for

characterizing harvesting and processing technologies were given above). However, one may also include measures of prohibited species bycatch (those that must be discarded and are subject to mortality risks) as "bad outputs" associated with production of the marketed or "good" outputs. This may be especially relevant for fisheries in which management actions are expected to significantly affect bycatch rates. In the simplest terms, a single-input productivity measure such as labor productivity is computed as the ratio of output to labor hours. These measures are quite limited, however, in that they fail to account for the use of other inputs in production. That is, the ratio of total output to labor hours may have increased over time for a particular plant, but this may be due to increased use of automation (so the decreased labor use has been offset by increased capital expenditures).

Therefore, *total* factor productivity measures are preferred, which account for the use of, and substitution among, all inputs in production. Because the contribution (and cost) of a one-unit change in each input can differ widely, estimates of each input's role in production are needed to account for the change in output that may be attributed to that input. This can be accomplished by directly estimating the output elasticity for each input (with a primal model), or as commonly done, by approximating the elasticity with its cost share (Jin et al., 2002). Total factor productivity can also be computed using Malmquist Index approach (Herrero and Pascoe, 2003). This formulation allows one to decompose variations in output levels over time into changes in productivity and efficiency. In summary, in order to calculate productivity measures, we would need to collect additional information on the quantity of inputs (these inputs were described earlier) used in harvesting and processing operations.

Efficiency

Efficiency measurement can be undertaken in several ways to isolate different notions of, or components of overall, efficiency. *Technical* efficiency is similar to productivity in that it relates to the quantity of inputs used to obtain a given bundle of output(s). Essentially, productivity measurement involves computing how the skill with which inputs are converted to outputs progresses (or regresses) over several periods of time (i.e., how the production possibilities frontier shifts or twists over time), while technical efficiency measures capture each firm's relative proficiency in production processes within each period.

The measurement of *input-allocative* efficiency pertains to the degree to which one minimizes the cost of producing a given level of output by choosing an optimal proportion of inputs, given their relative costs and contributions to production. Cost savings afforded by eliminating the race for fish in a fishery are likely to increase input-allocative efficiency. *Output-allocative* efficiency reflects the degree to which one chooses the optimal mix of outputs (catch, or portfolio of processed products), given the respective market prices and opportunity costs of producing one output instead of another. For fisheries that have typically been prosecuted on a single-species basis, it is not clear that there is much room for improvement in this area of performance for harvesting operations, but processing may be fertile ground for progress.

Loosely speaking, measures of input (output) allocative efficiency can be thought of as the extent to which one minimizes (maximizes) the cost of (revenue from) a given level of outputs (inputs) and technical efficiency. Vessels that operate in Olympic-style fisheries are often forced to sacrifice allocative efficiency in order to maximize catch. As a result, one may be more likely to see gains in allocative efficiency than technical efficiency when such fisheries are rationalized. Additional data will be required to construct the aforementioned efficiency measures in Alaska fisheries. Technical

efficiency measures require additional detail on the inputs used in harvesting and processing; input allocative efficiency measures will also require input price data not currently available.

Aggregation Issues

An additional issue to consider when contemplating a data collection program for evaluating the impacts of fishery management is the effects of data aggregation. When possible, cost-earnings data should be obtained and utilized in a disaggregated format in order to avoid several problems that limit one's ability to understand the effects of rationalization.

First, when data are examined only at an aggregate level, it may not be possible to spot or correct data anomalies such as outliers or data entry or response errors that may bias results. Second, 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 rationalization program. Furthermore, if data are aggregated and submitted to analysts according to a particular grouping (say, by size class), it may not be possible to change the point of reference for the analysis to inquire about other groupings of interest. Aggregation also decreases the amount of observations available for statistical models, which are needed to isolate the effects of rationalization from other external effects (such as market or stock effects).

Furthermore, rather than looking at individual decisions and the state of the factors that affect them, the use of aggregated data only allows one to look at the net outcome of a multitude of decisions and states of nature. Aggregation masks observed choices, and thus requires one to assume that all firms are affected identically by changes in the influential variables. 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 (Chambers 1988). Typical assumptions that must hold, for example, are that all plants or 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 can lead to erroneous results.

Conclusions

The issues that have motivated the development of fishery rationalization programs in Alaska to date exist in other fisheries, as well. In the coming years, fishery rationalization programs in a variety of forms may be implemented in order to provide the proper incentives for participants to conduct operations in a more efficient, viable, and safe manner. These programs will, by design, result in major structural changes to fisheries and are likely to create losers as well as winners. It will be important for fishery regulators to be able to accurately assess program effects in order to demonstrate the net benefits that justified dislocations. Furthermore, a detailed understanding of the impacts of particular rationalization programs will help guide any changes that may need to be made, or assist other decision makers in designing future rationalization programs.

It is also important that analysts consider the questions one wants to be able to address, the types of measures that are likely to be constructed to evaluate the effects of a program, and the models that may be the most appropriate for the particular institutional setting, when designing data collection programs. These factors will play a major role in determining which data elements need to be collected, and thus, the cost of the data collection program. Ultimately, more rigorous analyses will require more detailed records and a greater public burden.

Our general advice is that direct measures of profitability and financial performance are less prone to misinterpretation and easier to compute than other measures derived from economic models, but do not allow analysts to untangle the effects of institutional changes from those due to changes in markets or the natural environment. Therefore, it will typically be necessary to account for such factors by incorporating them into models utilizing production, cost, or revenue data.

Crew License Numbers and Fishery Participation in Crew Licenses

Commercial fishing crewmembers have been one of the most difficult fishery participant groups to characterize because systematic information about them is not available. However, we do know that some of the most significant impacts of fisheries management changes affect this group. At the moment, the most significant barrier to understanding more about crewmembers is that we have no source of data on the specific fisheries in which crewmembers are fishing.

The Alaska Department of Fish and Game collects some basic information on Commercial Crewmember License Application Forms and the Alaska Fisheries Science Center has analyzed this data over and 11 year period (1993-2003). Results of that inquiry are available at ftp://ftp.afsc.noaa.gov/posters/pCarothers01_comm-fish-crew-demographics.pdf. It includes information on the total number of licenses annually over time, the mean age of crew over time, gender distribution, mean age by gender and residency, residency in Alaska or other states, and residency in Alaska communities. However, because there is no information on the license application about the specific fisheries in which the applicant will participate, and no other systematic source for that information, the analysis can only address all fisheries aggregated together. This aggregated information is not tremendously helpful to resource managers who are dealing with fishery-specific management plans and social impact assessments.

For example, based on the analysis of the ADF&G crew license database, we know that the number of crew licenses issue annually has decreased at an average annual rate of almost 6% with the most drastic increases (15% each year) occurring between 2000 and 2002. Without information on which fisheries these crew members fished, it is impossible to say whether this decrease has been concentrated in certain fisheries, (such as the salmon fishery due to price declines or the halibut fishery due to IFQ-based consolidation) or analyze further what it means in terms of social impacts on this group.

The best source of data for this would be requiring the crew license number of participating crew on the ADF&G fish tickets. This information could then be linked to the demographic information on the license application. With this linkage, we will be able to analyze and predict social impacts on crew in the manner that is best suited to the types of analyses the Council requires. Crew information on fish tickets would also permit a suite of economic analyses that have not been previously possible.

An alternate and inferior route for getting some data on this topic would be to add a field in the crewmember license application requesting the applicant to disclose which fisheries they intend to fish in, and which fisheries they fished last year (if applicable).

Processing Plant Worker Demographics

Similarly, processing plant workers are an important sector of fisheries participants about which there is little precise information. The Census often does not capture these migratory populations because Census data is based solely on residency on April 1 of the Census year, a time in which many plants are not operating at full capacity.

Social impact assessments could be improved greatly by collecting Census-like data on these populations. The best source for this information would be the processing plants, both onshore and offshore.

The type of data that would be most useful to collect includes the total number of workers at each plant location per week or per month, and demographic information about them such as age, gender, residency, nationality, primary language. Information on average length of stays and days worked would also be quite useful. Together this information would allow one to construct a picture of this important sector and begin to predict how different elements of it might respond to different management changes.

Additional Information

Another important missing element of fishing data is data on self management and product quality bonuses. For example, Sea State, Inc. is hired by the pollock and flatfish fisheries to examine bycatch information and to help the fleets avoid areas with high bycatch. When this type of self-management occurs without clear communication with NMFS, it is difficult for NMFS and other researchers to accurately model fishing behavior or estimate the costs of different spatial management options. Similarly we do not know 'roe bonuses' or other quality premium paid for specific fishing trips, which again hinders our ability to accurately estimate the value of fishing in different locations.

An additional aspect of trip behavior that would be very useful to understand is the scheduling of trips. We have only an anecdotal understanding of how landings are scheduled at in-shore processors.

Table 1. Performance Measures

Performance Measure	Metric	Revenues	Variable Costs	Fixed Costs	Capital (K)	Output (Y)	Inputs (X)	Output Prices (P)	Input Prices (W)	Stock Size
Microeconomic-based:										
Capital Utilization (KU)										
KU	days fished / days fished$^{Max.}$									
KU	K^*/K	C^p,C^r	C^c,C^p		C	C^c; *C*	C^r; *C*	C^p,C^r;C^p,C^r	C^c,C^p;C^c,C^p	M
Capacity Utilization (CU)										
CU	$Y/Y^{Max.}$				C	C	C			M
CU	$Y/Y^{min(SRAC),\ tan(SRAC-LRAC)}$		C		C	C	M		C	M
CU	C^*/C	C^p,C^r	C^c,C^p		C	C^c; *C*	C^r; *C*	C^p,C^r;C^p,C^r	C^c,C^p;C^c,C^p	M
Profit	TR – (VC+FC)	C	C	C	M	C^p	C^p	M	M	M
Quasi-rents	TR – VC	C	C		M	C^p	C^p	M	M	M
Productivity										
Single-factor	Y_i/ X_i				C	C	C			M
Multi-factor	$Y / f(\mathbf{X})$				C	C	C	M	M	M
Technical Efficiency					C	C	C			M
Output-Allocative Eff.	$P^{/}Y / P^{/}Y^*$	C			C	C	C	C		M
Input-Allocative Eff.	$W^{/}X / W^{/}X^*$		C		C	C	C		C	M
Financial-based										
Revenues	TR	C								
Gross margin	TR – VC	C	C							
Net Profit (NP)	TR – (VC+FC)	C	C	C						
Return on Revenue	NP/R	C	C	C						
Return on Capital	NP/K	C	C	C	C					
Return on Resource	NP/TAC, SSB or tons	C	C	C						C
Net Capital Ratio	Total assets / total liabilities	C	C	C	C					
Current Ratio	Current assets / current liabilities	C	C	C	C					
Pseudo Profits	$\rho^{/}Y$ - TC		C	C	M	C	M	C	M	M

C= needed to merely construct the measure; an *italicized C* implies that the data are needed if one instead chooses to estimate only the "envelope" equations derived from profit, cost, or revenue functions through Hotelling's Lemma, while superscripts further delineate the data required for profit (C^p), cost (C^c), or revenue (C^r) based models.
M = also needed for modeling effects of policies, market impacts, etc.

Appendix 4 to Data Collection Discussion Paper – October 2006

Data for Regional Economic Impacts

Regional or community economic analysis of proposed fishery management policies is required by the Magnuson-Stevens Fishery Conservation and Management Act (MSA), National Environmental Policy Act (NEPA), and Executive Order 12866, among others. For example, National Standard 8 (MSA Section 301[a][8]) explicitly requires that, to the extent practicable, fishery management actions minimize economic impacts on fishing communities. To satisfy these mandates and inform policymakers and the public of the likely regional economic impacts associated with fishery management policies, economists need appropriate economic models and data to be used for implementing the models.

While there are many regional economic models available for use in regional economic impact analysis for fisheries (Seung and Waters 2006), much of the data required for regional economic analysis of fisheries are either unavailable or unreliable. IMPLAN (IMpact analysis for PLANning) is widely used by economists for implementing various regional economic models. However it is not advisable to use unrevised IMPLAN data for analyzing fishery industries in the U.S. for several reasons. First, IMPLAN applies national-level production functions to regional industries, including fisheries. While this assumption may not be problematic for many regional industries, use of average production relationships may not accurately depict regional harvesting and processing technologies. Therefore, to correctly specify industry production functions, it is necessary to obtain primary data on harvesting and processing sector expenditures through detailed surveys or other methods. Second, the employment and earnings of many crew members in the commercial fishing sector are not included in the IMPLAN data because IMPLAN is based on state unemployment insurance program data which excludes "uncovered" employees such as self-employed and casual or part-time workers. Therefore, IMPLAN understates employment in the commercial fishing sectors. Processing sector data is also problematic stemming from the nature of the industry. Geographical separation between processing plants and company headquarters often leads to confusion as to the actual location of reported employment. Finally, fishery sector data in IMPLAN are highly aggregated. Models using aggregate data cannot estimate the potential impacts of fishery management actions on individual harvesting and processing sectors. To estimate these types of impacts, IMPLAN commercial fishery-related sectors must be disaggregated into subsectors by vessel and processor type. This requires data on employment, labor income, revenues and expenditures (intermediate inputs) by vessels and processors. Currently collection of such data depends on voluntary reporting. However, reluctance to provide these data, primarily for business confidentiality reasons, makes it very hard to obtain useful regional economic information through a voluntary data collection program.

It is also necessary to identify the place of residence of the owners of harvesting vessels and processing facilities. The amount of net returns to capital that remain within the study region depends on the residency of these owners. For example, many of the harvesting vessels operating off Alaska are owned by residents of Washington and Oregon, so it is likely that most of the capital income earned by these vessels will leave Alaska. Similarly, the residence of crew members and processing workers needs to be identified to estimate the leakage of labor income. Some labor income will stay in the study region, since nonresident workers may spend some of their income there. However, most of nonresidents' labor income will likely leave the region. In general it is difficult to identify the residence of economic agents using existing data. Additionally since many of the intermediate inputs used in fishery industries are imported, detailed information on regional trade flows is also needed. It is important to estimate how much of the goods and services used as intermediate inputs in fishery industries are imported from other regions. In the case of Alaska, most of the intermediate inputs used in fishery industries are imported, mainly from Washington State. If economic impacts are calculated assuming that these goods and services are supplied by local industries, then regional impacts will be significantly overestimated

(Hushak 1987). Only those expenditures made within the study region will generate positive economic impacts for the region.

In sum, while regional economic models for analysis of fisheries do exist, reliable data on fisheries-related economic sectors necessary to implement the models is lacking. The absence and/or deficiencies of these data have severely limited development of viable regional economic models for fisheries. Without reliable data obtained through a comprehensive (and mandatory) data collection program, it will continue to be very difficult to develop viable economic models. Therefore to support accurate regional economic analysis of fisheries, it is critical to have a comprehensive data collection program. For example, one remedy would be to include a mandatory data collection program in the reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act or its implementation standards and guidelines. In the absence of accurate information on the economic conditions facing our regional fishing fleets and processing facilities, we will continue to fall short of our obligations to maximize economic benefits of fisheries to the nation while minimizing negative impacts on fishing communities.

Realistically, it may not be feasible in near future to adopt a complete, comprehensive, and mandatory data collection program, in which harvesting and processing sectors must submit all the data required for regional economic analysis fisheries. However, there are some data elements which, if collected regularly in a mandatory fashion, would improve significantly the capability of fishery regional economic models. These data include employment and labor income in disaggregated harvesting and processing sectors by residency. The models developed with these data as well as other available and estimated data will provide more reliable results which will improve in a significant way the policy-makers' decision-making capability in terms of the policy effects on fishery-dependent communities.

References

Hushak, L. 1987. Use of Input-output Analysis in Fisheries Assessment." *Transactions of the American Fisheries Society* 116: 441-449.

Seung, Chang and Edward Waters. "A Review of Regional Economic Models for Fisheries Management in the U.S." *Marine Resource Economics*, Vol. 21, No. 1, pp. 101-124, 2006.