**ESTIMATED TIME** 

8 HOURS

**ALL ITEMS** 

# **MEMORANDUM**

TO:

Council and AP Members

FROM:

Chris Oliver

**Executive Director** 

DATE:

January 24, 2012

SUBJECT:

BSAI crab issues

**ACTION REQUIRED** 

(d) Report on BSAI Crab ROFR Workgroup, action as necessary. (T) Delayed

(e) Final action to revise crab economic data collection

#### **BACKGROUND**

(e) Final action to revise crab economic data collection

Over the course of several meetings, the Council has considered the revision of the crab Economic Data Reports (EDR) to improve the accuracy and reduce the cost of that program and eliminate redundancy with other data collection. Based on discussion papers, reports, public testimony, and its experience with the data collection initiatives, the Council made an initial review of an analysis of alternatives to revise the crab EDR at its October 2011 meeting. At that time, the Council made revisions to the alternatives, as well as requested additional analysis concerning certain aspects of the amendment, and requested that the document be released for public review and action at this meeting. Staff mailed the analysis to the Council in advance of this meeting. A copy of the executive summary of the analysis is attached as Item C-3(e)(1).

# **EXECUTIVE SUMMARY**

In August of 2005, fishing in the Bering Sea and Aleutian Island crab fisheries began under a new share-based management program (the "program"). As a part of the program, the Council developed an economic data collection program (referred to as "economic data reports" or EDR) to provide information to analysts to assess the effects of the program and future amendments to the program. Based on reviews of the data, it has been established that certain data elements collected are not accurately or consistently reported across respondents, preventing their use for some of their intended purposes, and other elements are wholly or partially redundant with other data collection. To address these shortcomings, as well as to address what is perceived excessive costs associated with the data collection, the Council has initiated this action to revise the data collection program.

#### **Purpose and Need Statement**

To guide its action to revise the data collection program, the Council has developed the following purpose and need statement:

As a part of its Bering Sea and Aleutian Island crab rationalization (CR) program, the Council developed a comprehensive economic data collection ("EDR") program to provide information to analysts to assess the effects of the CR program and identify problems that may require future amendments to the EDR program.

Council review of the EDR program, development of the EDR metadata through PNCIAC and testimony from the industry has resulted in the identification of substantial portions of the EDR data that are inaccurate. In addition, several elements are wholly or partially redundant with other existing data collection requirements, and some components may not further the Council's objectives. The cost to industry, both directly through data submission, and indirectly through cost recovery funding of program administration, outweigh the benefits of the resultant data and greatly exceed estimates provided in the initial analysis of the EDR program and in the accompanying regulatory analyses.

To address these problems, the Council intends to amend the EDR process so that the data collected is accurate, informative to the Council, not redundant with existing reporting requirements, and can be reported by industry and administered at a reasonable cost.

The Council expressly wants to limit the EDR to the collection of data that have been demonstrated, through the development of the EDR metadata, and other reviews of the data, to be sufficiently accurate. Data collection should be structured and specific elements identified, to minimize costs while maintaining accuracy and providing the greatest information value to the management decision making process.

As analysts develop, refine, and verify methods for accurately collecting additional informative data elements the Council will consider expansion of the data collection program to include those elements. This process can also inform the future Council action regarding other existing and future EDR programs.

# **Alternatives**

# Catcher Vessel Alternative 1 (status quo)

The status quo alternative would maintain the current catcher vessel data collection program, which collects data from all catcher vessels participating in any program fishery. Data are collected in several categories. Fishing data, such as days fishing and days traveling between port and grounds are collected

Modification of economic data reports - Public review

Bering Sea/Aleutian Islands Crab Fisheries

February 2012

for each fishery. Delivery and revenue data are collected for each fishery by share type, with leased shares identified. IFQ use is collected with the vessel owner's shares distinguished from those leased from others. Crew data are collected, including payments to crew and captain by fishery, typical factor deductions and charges, and net revenue shares. Crab fishery costs (such as insurance costs and pot and gear purchases) are collected, most of which are aggregated across all crab fisheries. Fuel and bait purchases are also collected by crab fishery. Annual vessel costs (aggregated across all vessel activities) are collected including investments and repairs and maintenance, as well as fuel and fluid purchases. In addition, general annual data are also included in the collection, including all revenues and harvests, as well as days at sea and annual labor costs.

#### Catcher Vessel Alternative 2

The second alternative excludes many of the variables collected under the status quo. Fishing data are removed. Landings and revenues by share type would be collected along with leased quota and lease costs. In addition, a count of the number of crew contributing shares to the vessel's harvests would be collected. Payments to captains and crew would be collected, along with all unique crew contracts and settlement sheets. Purchases of new pots would be collected along with gallons of fuel aggregated across all fisheries. Vessel investment, repair, and maintenance costs would be collected, along with annual insurance costs and fuel costs. The vessel's annual gross revenues and payments to labor would also be reported.

# Catcher Vessel Alternative 3

Alternative 3, is similar to Alternative 2, but further reduces the data collection, limiting reporting to deliveries and revenues and crew data. Deliveries and revenues would be submitted by share type, along with pounds of shares and monetary costs of arms' length leases. Fuel use in gallons by fishery would be collected along with total fuel use and costs annually.

# Shore Plant and Floating Processor Alternative 1 (status quo)

The status quo collects data from every plant that operates in a crab program fishery. Production data are collected, including processing days and the amount of raw crab processed and finished pounds, as well as products by type, box size, and size. Revenue data collected include first wholesale sales by species, product, grade, size, and box size, distinguishing sales to affiliated entities from sales to unaffiliated entities. Custom processing revenues are also collected. Labor data are collected by crab fishery, including average processing positions, number of man hours, total payments to labor, and processing employee residence. Custom processing services purchased are collected by fishery, including raw and finished pounds by size, grade, and box size, as well as payments. Crab purchases are collected by share type, size, and grade. Crab processing costs are collected including fees and taxes, lease costs, and observer costs by fishery, along with processing materials, food and provision, repackaging, freight, and storage costs aggregated across all crab fisheries. General plant costs are collected, including annual fuel and fluid, investment, and repair and maintenance costs. In addition, general processing information is collected, including processing days, total gross revenues, total finished product pounds, and total labor costs.

#### Shore Plant and Floating Processor Alternative 2

As with the catcher vessel sector, many of the variables collected under the status quo are omitted from the second alternative. The first and last day of processing is collected. Revenues by fishery are collected, with transactions with affiliated entities separated from transactions with unaffiliated entities. Custom processing revenues are also included, along with quantities of custom processed crab products. Labor man hours by crab fishery are collected, as are total payments to processing labor and crab processing crew by residence, each on a crab fishery basis. Custom processing services purchased are collected by crab fishery, identifying pounds of raw crab processed and finished product amounts together with the

payments for services. Crab purchase data also included, by fishery and share type. Costs of IPQ leases are also collected, but processing operational costs are largely excluded from this alternative. Salaries of foremen, managers and other salaried employees, aggregated across all fisheries, are also collected. General plant costs are collected, including annual fuel and fluid, investment, and repair and maintenance costs. In addition, general processing information is collected, including processing days, total gross revenues, total finished product pounds, and total labor costs.

# Shore Plant and Floating Processor Alternative 3

Alternative 3 is very similar to Alternative 2. Under this alternative plant labor information is aggregated across all crab fisheries (as opposed to being collected on a crab fishery basis under Alternative 2). In addition, IPQ lease data collected will be only monetary payments for arm's length transactions. Crab size and grade will be eliminated from revenue data and box size information will be across various size categories. Revenues for all sales will be reported FOB Alaska. Reporting will also be required by any company contracting for custom processing, as those companies are not currently required to report custom processing costs or revenues from sales.

#### Catcher Processor Alternative 1 (status quo)

The status quo catcher processor data collection is similar to the status quo data collection of the other sectors. Fishing data, such as days fishing and days traveling between port and grounds are collected for each fishery. Production data are collected including processing days and the amount of raw crab processed and finished pounds, as well as products by type, box size, and size. Revenue data collected include first wholesale sales by species, product, grade, size, and box size, distinguishing sales to affiliated entities from sales to unaffiliated entities. Custom processing revenues are also collected. Harvest crew data are collected, including payments to crew and captain by fishery, typical factor deductions and charges, and net revenue shares. Data are also collected on processing crew, including number of processing crew and their payment. Custom processing services purchased are collected by fishery, including raw and finished pounds, as well as size, grade, and box size, as well as payments. Crab purchases are collected by share type, size, and grade. Crab fishery costs, such as insurance costs, pot and gear purchases, are collected, most of which are aggregated across all crab fisheries. Fuel and bait purchases are also collect by crab fishery. Crab processing costs are also collected including processing materials, repackaging, freight, and storage costs aggregated across all crab fisheries. Annual vessel costs (aggregated across all vessel activities) are collected including investments and repairs and maintenance, as well as fuel and fluid purchases. General annual data are also included in the collection, including all revenues, together with total pounds of raw fish and crab and total pounds of finished product, as well as days at sea, days of processing, and annual labor costs.

# Catcher Processor Alternative 2

The second alternative scales back the data collection considerably. One notable addition is the collection of landings and revenues from the vessel, in the event it makes deliveries to another processor. Revenue data (from both sales of products and custom processing) are collected, as under the status quo. Leasing information is collected by crab fishery, as well as a count of the crew on the vessel who contribute shares to the vessels harvests. Payments to captains and crew are collected, along with harvesting crew license information and processing crew residence information. In addition, captain and crew contracts and settlement sheets are collected. Custom processing services purchased are collected by crab fishery, identifying pounds of raw crab processed and finished product amounts together with the payments for services. Crab purchase data are also included, by fishery and share type. Purchases of new pots would be collected and fuel use aggregated across all fisheries. Vessel investment, repair, and maintenance costs would be collected, along with annual insurance costs and fuel costs. The vessels annual gross revenues and payments to labor would also be reported. General annual data are also included in the collection, including all revenues, together with total pounds of raw fish and crab and total pounds of finished

product, as well as days at sea, days of processing, and annual labor costs.

# Catcher Processor Alternative 3

Alternative 3 is very similar to Alternative 2. Under this alternative, sales would be reported using boxes size categories and using Alaska as the free on board (FOB) location. Custom processing activity would include both the pounds of raw crab processed and pounds of product. Alternative 3 also differs in that it collects only leasing costs for arm's length leases and omits the collection of the number of crew contributing shares to a vessel's harvests, but includes a check box to indicate whether the skipper is a vessel owner. Alternative 3 also excludes the collection of crew license numbers and processing crew residence information. Pot purchase data are also omitted from the collection under Alternative 3, as well as vessel investment, repair, and maintenance costs, and insurance information. Gallons of fuel for each crab fishery and IPQ lease costs would be collected under this alternative, but not under the second alternative. The general annual data reported under Alternatives 2 is also excluded from this collection.

# Effects of the alternatives

Under the status quo catcher vessel alternative, analysts are provided data to understand whether different share types bring different landings prices in the fisheries. In addition, captain and crew compensation levels are available, which can be examined relative to vessel revenues, vessel harvests, and fishing time. By combining vessel investment costs and repairs and maintenance costs, analysts can gain a perspective on the relative spending for vessel upkeep and improvements. These can be examined across the fleet and over time to understand spending patterns relative to effort in the fisheries. The last section of the data collection provides data concerning overall activities of a vessel. These data are the only source of data concerning total days at sea, total vessel revenues, and total labor costs. Through these elements, analysts can compare operations in crab fisheries with a vessel's total operations to develop a basic understanding of the role crab operations relative to a vessel's total operations for these factors. While the status quo alternative provides these benefits, a substantial portion of the submitted data are of poor or unknown quality, and thereby, little benefit in their current form. The burden associated with reporting under the status quo alternative is high (relative to the other alternatives). In the case of vessels that pool shares for fishing in a cooperative, developing lease data often requires several simplifying assumptions and substantial effort to unbundle cooperative fishing records. Location of purchase information requires respondents to sift through records to attempt to separate purchases by location. These data are also problematic, as matching acquisitions to location of purchase may not be possible through some invoices. Processing these data also is a substantial burden on agency staff and contractors. Although some elements of the status quo alternative provide data that are useful for examining some factors in the fisheries, a large share of the data elements collected currently provide little information, at a substantial cost to submitters and the agency.

The second catcher vessel alternative would reduce the reporting and management burdens substantially from the status quo. The decrease in analytical utility of the data collection from the status quo is mitigated, as many of the omitted elements are deemed to be unreliable. Analysts would be able to examine landings revenues by share type, crew compensation, and certain cost elements. Although fuel costs by fishery would be eliminated, pot purchase information would be improved, by removing the purchase of used pots (which are not very informative of vessel level operations due to pot sharing arrangements).

The third catcher vessel alternative is similar to the second alternative, with a few specific differences. Lease data reporting is limited to arm's length leases, which should improve the informativeness of those data, as well as reduce the burden associated with reporting. On the other hand, the omission of all collection of cost data leaves analysts to draw inferences from other data to assess cost changes in the fishery. While it may not be feasible to collect reliable comprehensive cost information, certain reliable

elements (including those collected under the second alternative) may provide some direct information concerning operational cost changes in the fishery. The costs of this alternative are reduced, by elimination of comprehensive lease information and all cost elements; however, the elimination of all cost information from this alternative reduces the information available to analysts under this alternative.

Under the status quo shore-based and floating processor alternative, production and sales data are collected by crab grade and size and box size. Although these data appear to provide little information under current processing and grading practices, should those practices change in the future, it is possible that these data could be informative. Revenue data also distinguish sales to affiliated companies, which reveal differences in pricing practices for internal sales. Custom processing revenues, which are not collected elsewhere, provide some information concerning the price of processing services and their value in the fisheries. Crab purchase data provide information concerning landing prices by share type, which are unavailable from other sources. In addition, total plant labor costs provide data concerning payments to labor that cannot be obtained otherwise. The status quo also collects substantial data that are not reliable, including processing costs and labor data by crab fishery. In many cases, these data reporting requirements impose a substantial burden, as efforts must be undertaken to develop a method of apportioning costs to different fishery operations. These require processors to review not only crab operational data, but also data from those other fisheries. These data also impose a substantial burden on the agency, which must process those data for use by analysts.

The second shore-based and floating processor alternative maintains the collection of most revenue data and custom processing services purchased, but eliminates the collection of production and most labor data. Scaling back from the status quo would prevent analysts from examining changes in production by box size or crab size or grade. Crab purchase information would continue to be collected allowing analysts to examine purchases by share type. Almost all crab processing and plant costs would be eliminated. The loss arising from excluding these elements is mitigated as they are typically pro rated and not reported consistently or accurately. Labor data would continue to be collected under this alternative, but (as noted) these data are not accurately reported, limiting their value.

The third shore-based and floating processor alternative is similar to the second processor alternative. The third alternative differs in that it collects aggregate labor data, which are likely to be more accurate and informative (although these data will not be informative concerning crab fishery operations specifically). These data will also be less burdensome to report and process, in comparison to the second alternative, since they will not require proration or division by fishery.

Under the status quo catcher processor alternative, catcher processors report fishing data and production data that are largely duplicative of (or which may be estimated using data available from) other reporting requirements. Revenue data are reported with the only current distinguishing characteristic being sales to affiliates. Data concerning IFQ (both held by a vessel owner and used by a vessel) are reported, but not accurately enough for those data to be reliable. Crew compensation under the status quo is believed to be accurate, but distinctions between harvesting and processing crews are unlikely to be accurate. Custom processing services purchased and crab purchase data are not applicable to catcher processors in most cases, but a burden arises only when they are applicable and these data are believed to be accurately reported. The extensive crab fishery and vessel cost information collected under the status quo is largely inconsistently and inaccurately reported, limiting the information value to analysts for fishery analysis. These data also are time consuming to report for respondents and require costly administrative processing by the agency. These factors curtail the benefits of the status quo.

The second catcher processor alternative (in a manner similar to the second catcher vessel alternative and second processor alternative) eliminates several data elements collected under the status quo. The

elimination of most fishing and cost data will not only reduce industry and administrative burdens, but the decline of information is mitigated due to the poor quality of these data currently. IFQ data are scaled back, but some of the data included in the collection are unlikely to provide useful information. Removal of some labor data from the collection could reduce the information concerning that important aspect of the fishery.

The third catcher processor alternative is very similar to the second alternative. The third alternative removes some elements that may be useful for analyses, such as information concerning the number of crew working on a vessel (both fishing and processing). At the same time, this alternative also improves on some elements, such as lease reporting, which is limited to arm's length leases only.