

**SUPPORTING STATEMENT
ALASKA REGION BERING SEA & ALEUTIAN ISLANDS CRAB
ECONOMIC DATA REPORTS
OMB CONTROL NO. 0648-0518**

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Economic Measures and Models developed with EDR data

Much of the data requested are used to compute total or average values based on a census of plants and vessels in the years before (1998, 2001, and 2004) and after rationalization. To compute many of these totals and averages, econometric models are required. In other cases, statistical models may be used; and in some cases, total or average values are reported. Examples of economic variables of interest include the following:

A. Measures not Requiring a Model

1. Measures for Harvesters not Requiring a Model

- a) Distribution of average catch and ex-vessel revenue by vessel class (e.g., length class and type), port of landing, and residence. Changes in ex-vessel prices.

Data Required: Catch and revenue information, vessel information, and vessel owner information

- b) Distribution of average variable vessel costs by vessel class (e.g., length class and type), port of landing, and residence

Data Required: Total variable costs, by vessel, vessel characteristics, landings records

Specific Measure:

Annual Total Variable Costs = CDQ costs + IFQ costs + fuel + lube and hydraulics + bait + food and provisions + freight costs for landed fish + lube and hydraulic fluid + crew share payment + captain's share payment + fish taxes + pot costs

Seasonal Variable Harvesting Costs = fuel costs + captain and crew costs + gear & line costs + bait costs

Freight & Storage Costs = Freight costs of supplies to vessel + freight costs for landed fish + storage costs

- c) Distribution of average quasi-rents by vessel class (e.g., length class and type), port of landing, and residence

Data Required: Total variable costs, by vessel, vessel characteristics, landings records

Specific Measure:

Quasi-rents = Total revenue - (CDQ royalty payments + IFQ costs + fuel + lube and hydraulics + bait + food and provisions + freight costs for landed fish + lube and hydraulic fluid + crew share payment + captain's share payment + fish taxes)

Quasi-rents / pounds landed = QR per pound

Quasi-rents / days fished = QR per day

- d) Seasonality of average catch and ex-vessel revenue by vessel class, port of landing, and residence

Data Required: Catch, ex-vessel revenue, vessel class, port of landing, ownership, and owner residence data

- e) Catcher vessel ownership interest in BSAI crab processors and processing QS/catch history

Data Required: Processor, vessel and QS ownership data

- f) Concentration of domestic and foreign ownership in the BSAI crab harvesting sector

Data Required: Vessel ownership data

- g) Level and distribution of harvesting and processing sector employment and payments to labor (number of individuals, hours/days worked, and income)

Data Required: Harvesting and processing sector employment and payments to labor data

Specific Measures:

Labor Income = Crew share payment + Captain's share payment + IFQ holder's payments (where applicable), or

Labor Income = Crew share*(Total revenue - CDQ leases - IFQ leases - fuel - lube and hydraulics - bait - food and provisions - freight costs for supplies - freight costs for landed fish - fish taxes)

Labor Income Per Capita = Labor income / # of crew earning shares

Average number of harvesting crew per vessel by season (by geographic region of employee residence)

Average captain's share (%) & wages

Average crew share (%) & wages

Description of typical expenses deducted from crew wages

h) Degree of involvement of BSAI crab harvesters and processors in other AK fisheries

Data Required: Processor and vessel ownership data, as well as total catch, production, and revenue data

i) Value of use right

Data Required: Information on the prices of buying and leasing quota share

j) Regional/community economic impacts (employment and income) of the BSAI crab fisheries

Data Required: Data on expenditures by location and the residence of those involved in harvesting and processing crab, and other regional economic data are required to develop regional economic models.

Specific Measures:

Location of employees

Location of gear purchases

Location of bait purchases

Location of fuel purchases

Location of lube and hydraulic fluid purchases

k) Observer Costs in Pre- and Post-IFQ Fisheries (Impacts of Increased Observer Coverage)

Data Required: Cost per day-at-sea, cost per pound of crab harvested, total observer costs per fishery

l) Vessel Values Pre- and Post-IFQ

Data Required/Specific Measures: Estimated market value of vessel and gear, estimated replacement value of vessel and gear

m) Total fish taxes by harvesting sector

Data Required/Specific Measures: taxes paid by fishermen

n) Changes in Fleet Composition (comparison of cost, revenue and compensation structure of vessels exiting the fleet versus those staying, based on the measures given in this section).

Data Required/Specific Measures: Cost, revenue, labor income, and compensation structure of vessels to construct the measures given in the above section

2. Measures for Processors not Requiring a Model:

- a) Distribution of processed product revenue by community and processor or processor category (size, ownership, location)

Data Required: Product revenue information, plant and plant owner information

- b) Processor ownership interest in BSAI crab catcher vessels and harvester QS/catch history

Data Required: Processor, vessel and QS ownership data

- c) Concentration of domestic and foreign ownership in the BSAI crab processing sector

Data Required: Processor ownership data are required.

- d) Labor Income

Specific Measures:

Averaged daily Wage = Labor Payment / # of Processing Days

\$ per Hour = Labor Payment / Total Man-hours

Labor as % of Revenue = labor payment / value of product

Labor as % of variable costs = labor payment / variable costs

- e) Product Recovery Rates (PRR) by species

PRR = Finished Pounds / Raw Pounds

- f) Production

Production per Day= Finished Pounds / # of Processing Days

Production per Employee = Finished Pounds / # crab positions

- g) Production sold to an affiliated company [Note: This is one of the variables specifically requested by DOJ and FTC. The purpose of tracking production by affiliated and non-affiliated entity is to determine the potential for anti-trust or anti-competitive behavior through the use of quota.]

ratio of affiliated to non-affiliated prices = price per pound sold to affiliated company / price per pound sold to non-affiliated company

% of product sold to affiliated companies = pounds of product sold to affiliated company / total finished pounds

- h) Value Added

Specific Measures:

Value Added = Revenue - raw pounds cost

Community Impacts

Changes in crab processing employment = CPs + Floaters + Shorebased

Changes in Taxes Paid

Consolidation

Avg. Production per Plant = total finished pounds / # of plants purchasing crab

Observer costs

Observer cost as percent of revenue = Observer costs / revenue

Observer cost per day = Observer cost / # of processing days

Pre vs Post IFQ

Changes in Products Produced

Changes in grades produced

Changes in box sizes

Changes in product storage costs pre and post IFQ (expected to decline with extended fishing seasons)

Compare processing fees charged for custom processing to variable costs of firms

Labor Income:

Labor payment

Labor Income Per Capita

Labor payment / # crab positions

Variable Costs

(packaging materials, equipment and supplies +

food and provisions +

fuel, electricity, lube and hydraulic fluid +

labor payment +

raw pounds cost)

Quasi-rents

= Value of production - (packaging materials, equipment and supplies + food and provisions + fuel, electricity, lube and hydraulic fluid + labor payment + raw pounds cost)

Quasi-rent Measures

Quasi-rents / pounds processed

Quasi-rents / day

Changes in Inventory (by product)

= Total production - total sales - custom processed for others + custom processed for you

We also can compute the *annual* costs of:

taxes
packaging materials, equipment and supplies, and re-packing costs
food and provisions
fuel, electricity, lube and hydraulic fluid
freight -- supplies
freight -- products
storage
water, sewer and waste

Note: We can compute seasonal/fishery specific costs by using information on total days spent processing crab in each fishery.

We also can compute *seasonal* costs of:

Broker's fees and promotions
observer costs

B. Measures Based on Economic Models

Obviously, there are various models that analysts can choose among to construct a given measure, and each subtle difference in the approaches often necessitates different types of data. For example, harvesting capacity can be measured in a primal, physical framework or a dual, cost-based framework (there are other choices which we will not elaborate on here), and both models have different data requirements. Therefore, the goal was to consider the general types of models that are typically used to construct the measures of excess harvesting and processing capacity, economic returns, variable costs, and revenues. The following discussion outlines the approach that was taken in selecting necessary data elements:

The economic models to be used are based upon the objective measures previously identified by the Council's Scientific and Statistical Committee (SSC) to monitor the success of the crab rationalization program. Here we identify the method or models typically used to construct such measures and the data required to adequately construct them.

The measures identified by the SSC are intended to allow the Council to monitor the success of the crab rationalization program in terms of addressing the five problems currently facing the fishery (as identified in the BSAI crab rationalization problem statement prepared by the Council in February 2002¹). Those five problems and the summary of the problems facing the Council are as follows:

1. Resource conservation, utilization, and management problems;
2. Bycatch and its associated mortalities, and potential landing deadloss;
3. Excess harvesting and processing capacity, as well as low economic returns;
4. Lack of economic stability for harvesters, processors and coastal communities; and

¹ North Pacific Fisheries Management Council, 2002. Minutes of the June, 2002 NPFMC Meeting, Dutch Harbor, Alaska, pp. 22. <http://fakr.noaa.gov/npfmc/minutes/Council602.pdf>.

5. High levels of occupational loss of life and injury.

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

The Objective Measures

This section discusses the economic objective measures that will likely need to be computed, and the corresponding economic data that is needed (some of which must be elicited through the Economic Data Reports, or EDRs). For a majority of the measures elaborated on below, the required data is discussed in the context of the vessel or plant (and at times, the firm), depending on the measure. Measures that are primarily production based (capacity utilization, productivity, and efficiency) are best constructed with data from the vessel or plant level. Such a focus allows the analyst to more directly 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 rationalization. However, because the production process of one vessel or plant is at times only one component of the 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.

Therefore, in addition to the individual measures discussed below, ownership data are required to link each piece of the overall puzzle. This data allows one to assimilate the individual effects into the likely overall” effect of crab rationalization on the residual claimants of the operations we observe on a piece-by-piece basis. It also allows analysts to monitor structural changes not reflected directly in performance- or profit-based measures, such as changes in the concentration of domestic and foreign ownership in the harvesting and processing sectors, the structure of ownership (including proprietorships, publicly traded corporations and privately held corporations), and the relationships both within firms, (i.e., the amount and nature of vertical and horizontal integration) and among firms.

Although vessel-, plant-, or firm-level detail is needed to adequately construct many of the model-based measures discussed below, there are some simple averages for which aggregate (e.g., sector-level) data can likely provide an adequate representation. One underlying problem with using aggregated data for modeling purposes, however, is that the conditions under which the aggregate data accurately represents the individual firms’ production technologies and decisions is quite restrictive. The result is a model with unrealistic assumptions which may bias the resulting measures (aggregation issues constitute a large branch of economic theory). Furthermore, if the aggregation is too extreme, the information that can be obtained from a model will not allow the analyst to adequately explain the source or cause of any changes. In other cases, the lack of a sufficient number of observations (i.e., data on each vessel, plant, or firm operating in a given time period) may preclude estimation of the model typically used to

construct a particular measure. Finally, aggregate data cannot be used to determine whether most fishermen and processors will have benefited from crab rationalization. For example, aggregate processor profits could increase even though the profits for the majority of the processors decreased.

Problems, Measures, and Data

The measures identified by the SSC are intended to allow the Council to monitor the success of the CR Program in terms of addressing the five problems currently facing the fishery (as identified in the BSAI crab rationalization problem statement prepared by the Council in February 2002). Those five problems facing the Council are as follows:

1. Resource conservation, utilization, and management problems;
2. Bycatch and its associated mortalities, and potential landing deadloss;
3. Excess harvesting and processing capacity, as well as low economic returns;
4. Lack of economic stability for harvesters, processors and coastal communities; and
5. High levels of occupational loss of life and injury.

This discussion does not address the specific data needed to analyze problems 1), 2), and 5) identified by the Council as the primary data required are not necessarily economic in nature and therefore not requested in the EDRs under consideration. However, some of the objective measures discussed for problems 3) and 4), and the data used therein, may be useful in monitoring the success of the crab rationalization program with regard to problems 1), 2), and 5).

Problem #3, Excess Harvesting and Processing Capacity and Low Economic Returns

Measures:

a) Harvesting capacity and capacity utilization

Data Required: Typically, the analysis of capacity and capacity utilization is based upon the cost structure of the vessel, and examines whether the observed level of catch coincides with the least-cost level, given the capital stock. This process requires one to compile information on all significant variable costs (labor, fuel, bait, pots, etc.), including the price of all variable inputs and the quantities used, and estimate a cost function at the vessel level. A measure of the capital stock is also required, and is often expressed as the dollar value of the vessel and equipment onboard, or with proxies such as vessel characteristics [length, tonnage, horsepower, etc.]. One can then model the relationship between output (total catch, by species), input prices, and cost. Capacity is underutilized if production is currently less than the level at which total average costs are minimized, given the existing capital stock. The opposite is true if current output exceeds such a level. Further extensions of the model allow one to directly compute the contribution of the capital stock in production and thus, provide an alternative measure of the extent to which capital is being utilized.

Data Summary: Variable input prices and quantities purchased, capital quantities, and catch quantities (by species) are required.

Model to be estimated: econometric cost function or data envelopment analysis

b) Processing capacity and capacity utilization

Data Required: The same approach and data requirements would apply in assessing processing capacity and capacity utilization (although the specific inputs used and outputs produced are different). It can be more difficult, however, to quantify the capital stock for processors, as is evidenced by conversations with industry. Respondents will be asked to provide the assessed value of plant and equipment, which can be used as a proxy for the capital stock. And, given the panel nature of the data, fixed effects estimators may be used to in part account for the fixed, unobserved differences between plants that may be attributable to the differences in the capital stock.

Data Summary: Variable input prices and quantities purchased, capital quantities, and production quantities by species and product form are required.

Model to be estimated: econometric cost function or data envelopment analysis.

Analyses related to excess capacity and capacity utilization will likely be based on a cost function specification. In this model, total variable costs are regressed upon the outputs, the relevant variable input prices, quasi-fixed inputs, and environmental attributes (such as stock sizes) that may shift or twist the production possibilities frontier (and thus the costs of harvesting or processing a unit of crab).

For harvesting operations, the specification will be $\text{Variable Costs} = f(W, Y; X, \Omega)$, where W is a vector of input prices including bait, fuel, and crew; Y is a vector of outputs including catch levels for the relevant crab species; X is a vector of quasi-fixed inputs including the number of pots, vessel length, vessel tonnage, and vessel horsepower; and Ω is a vector of environmental variables such as stock sizes for the various crab species. This regression will be undertaken using a flexible functional form in order to minimize a priori restrictions on the production technology, recognizing the trade-offs between increased flexibility and approximation capabilities with the requisite degrees of freedom required for reasonable bounds on parameter estimates. Please see the discussion paper “Performance Measures for the Bering Sea and Aleutian Islands Crab Rationalization Programs: Data and Other Considerations” for a further discussion.

c) Harvesting sector quasirent (total revenue - total variable cost)

Data Required: This measure is comprised of total revenues less total variable cost. The Council has restricted us to focus solely on crab operations, which implies that we will not have a complete picture of each vessel’s overall economic activities, and thus cannot adequately apportion all of their fixed costs across fisheries. By focusing on quasirents, we can avoid introducing this potentially significant source of error.

If one wants to understand the source of any change in quasirents at the most basic level, one needs separate measures of total revenues and total variable costs. However, without details on total catch, and the prices and quantities of variable inputs, and quantities of quasi-fixed inputs, one cannot tell if variable costs changed due to changes in catch levels, effort (variable input) levels, or input prices, or quasi-fixed inputs. Furthermore, without detail on the quantities sold and prices received, for each species, one cannot tell if changes in revenue are attributable to changes in price, quality, or total catch.

Thus, without the above information, changes in quasi-rent cannot be explained and increased production or cost efficiency cannot be discerned from exogenous market impacts. The data components described above can also be used to construct predictive models that assess the likely change in production patterns, revenues, and costs in response to market shocks and/or regulations.

Data Summary: Variable input prices and quantities purchased, quasi-fixed inputs, total catch quantities and prices received, by species are required.

Model to be estimated: econometric restricted profit function.

d) Processing sector quasirent

Data Required: essentially the same type of information is required as for harvesters, which is discussed in c) above (with the obvious qualification that the respective variable inputs are likely to be different and revenue data should include product form, by species, quantity produced, and price received).

Data Summary: Variable input prices and quantities purchased (including fish purchases by species), quasi-fixed inputs, total production, by species and product form, and prices received for each product are required.

Model to be estimated: econometric restricted profit function.

e) Processor or Harvester Productivity:

Data Required: The measurement of productivity essentially involves 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. 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 or vessel, 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 factor of

production can differ widely, each input's share of the total cost of production is needed as a weight when accounting for the changes in input use. There are other metrics used for productivity measurement, such as Malmquist indices, which do not require the cost data or the associated competitive market assumptions.

Summary: Direct inputs in production (quantities used and for some models, the cost of each), total catch or processed product quantities, by species are required.

Model to be estimated: Tornqvist total factor productivity index, Malmquist index, or econometric transformation function.

f) Technical Harvesting Efficiency

Data Required: The measurement of efficiency can be undertaken in several ways to identify different notions of 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, and technical efficiency measurement involves analyzing each firm's relative proficiency in production processes within each period.

Data Summary: Direct inputs in production and total catch quantities by species are required.

Model to be estimated: an econometric production frontier model, or a non-parametric data envelopment analysis model may be used to estimate technical harvesting efficiency.

g) Allocative Harvesting Efficiency:

Data Required: The measurement of *input-allocative* efficiency pertains to the degree to which one minimizes costs of producing a given level of output by choosing an optimal proportion of inputs, given their relative costs and contributions to production. In more familiar terms, cost savings afforded by eliminating the race for crab are likely to increase input-allocative efficiency. *Output-allocative* efficiency reflects the degree to which one chooses the optimal mix of outputs (here, catch or finished product, for harvesting and processing models, respectively), given the respective market prices and opportunity costs of targeting (or processing) one species (or product) instead of another. 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). Note that one can be input-allocatively efficient and output-allocatively inefficient, or vice-versa. Similarly, one can be technically efficient and allocatively inefficient. The point here is that each measure captures a different aspect of production, and each can be affected in different ways from changing institutional or regulatory environments.

Data Summary: The quantities of direct inputs in production and their costs, total catch (or processed product, for processing models) quantities and prices by species are required.

Model to be estimated: allocative harvesting efficiency may be assessed by estimating an econometric cost function model or a non-parametric data envelopment analysis model.

h) Processing sector productivity and efficiency

Data Required: The basic data required to measure productivity and efficiency in the processing sector is the same as in the harvesting sector -- only the definition of direct inputs and outputs changes. See e), f) and g) above for a description of the measures, models, and data.

Problem #4, Lack of Economic Stability for Harvesters, Processors and Coastal Communities

Many of the measures listed for Problem 3 (both the model-based measures and simple averages or totals) are well suited to assess the success of the crab rationalization program in increasing economic stability for harvesters and processors. This can be accomplished by examining each vessel or plant's annual profit or quasi-rents, and calculating measures of variation for pre- and post-rationalization periods. The detail afforded in the data used to construct c), d), e) and f) also allows one to account for exogenous market effects (or varying stock levels) that may affect stability. That is, one can ascertain whether economic stability or viability is more likely in the rationalized fishery (relative to pre-rationalization) when market shocks are prevalent. Stability can also be analyzed by designating vessels or plants into strata of interest (based on size, species composition, regional designation, etc.) and presenting the mean values for the group (along with indicators of the variation within that group) for each year. Such an approach will preserve confidentiality, yet allow for the most accurate and informative measures of stability and the distribution of income among and between harvesters and processors.

1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g. establishments, State and local governmental units, households, or persons) in the universe and the corresponding sample are to be provided in tabular form. The tabulation must also include expected response rates for the collection as a whole. If the collection has been conducted before, provide the actual response rate achieved.

The potential respondent universe is approximately 90 (84 full EDR, 6 certification only) catcher vessel owners, 5 (all full EDR) catcher processors, 29 (16 full EDR, 13 certification only) shoreside processors, and 8 (2 full EDR, 6 certification only) inshore stationary floating processors. For catcher vessel operations on average, two individual persons may collaborate to provide the data to complete an EDR, though in most cases there will only be one party submitting the data.

This data collection process will take the form of a census. Therefore, all vessel and plant owners are required to fill out the EDRs. The response rate is expected to be 100 percent, as non-compliance carries with it two severe penalties. First, no IFQ or IPQ will be granted to any vessel or plant owner that does not complete the EDR. Second, enforcement can levy fines against any individual who does not comply with the law.

2. Describe the procedures for the collection, including: the statistical methodology for stratification and sample selection; the estimation procedure; the degree of accuracy needed for the purpose described in the justification; any unusual problems requiring specialized sampling procedures; and any use of periodic (less frequent than annual) data collection cycles to reduce burden.

Respondents submitted both historical and annual EDRs at the beginning of the CR Program. Currently, only annual EDRs are collected from all vessels and plant owners participating in crab fisheries during each year. Owners of these vessels and plants are identified through fish tickets, Alaska Commercial Operator Annual Reports (COARs), and crab quota share holder data. We will not be sampling from these populations, but rather compiling a census for all years.

With the response (produced from completed and verified data forms), AFSC analysts will construct statistical models for estimating key variable cost values for each strata. This data will also be used to develop cost functions from this data and to estimate average variable costs of operations, average gross earnings, and quasi-rents. Other data on purchases by cost category may be developed to estimate changes in purchases and regional economic impacts before and after the CR Program is implemented. Several methods are available to estimate these outputs. The analysts will select the best methods based on an assessment of the response sample, the census data (from mandatory data forms) of other sectors, and other data.

3. Describe the methods used to maximize response rates and to deal with nonresponse. The accuracy and reliability of the information collected must be shown to be adequate for the intended uses. For collections based on sampling, a special justification must be provided if they will not yield "reliable" data that can be generalized to the universe studied.

Each of the owners and leaseholders in the BSAI crab harvesting and processing sectors is required to submit an annual EDR. Most of these potential respondents will also be applying for one or more crab fishing or processing permits that are required to participate in the CR Program. All persons who are owners and/or leaseholders of vessels and processing operations must submit an EDR to obtain one of these crab fishing or processing permits. The response to mandatory data requirements should be very high, because the continued opportunity to use these permits has substantial value. We are anticipating response rates of 95-100 percent.

NMFS has taken substantial efforts to obtain high response rates and to verify that data submitted is accurate and complete. For example, we have prepared (either ourselves or through a contractor) annual reports documenting the accuracy with which the information for each variable collected has been reported. Problems were pointed out and subsequently addressed by

making minor changes to the wording of problematic questions. We have hired an accountant to independently assess the quality of the reported data (through detailed financial audits) and found that the reported data are of sufficient quality to support analysis of the crab rationalization program. We have taken public comment on the data quality at the Council meetings as well as other “town hall” style meetings with fishery participants. We have also held meetings with NOAA data quality specialists to make sure we have followed all rules and protocols for ensuring the accuracy and quality of these data.

Enforcement of the data collection program with regard to non-compliance has been different from enforcement programs used to ensure that accurate landings are reported. It is critical that landings data are reported in an accurate and timely manner, especially under an IFQ system, to properly monitor catch and remaining quota. However, because it is unlikely that the economic data will be used for in-season management, it is anticipated persons submitting the data have been given an opportunity to correct omissions and errors before any enforcement action would be taken. Giving the person submitting data a chance to correct problems is considered important because of the complexities associated with generating these data. Only if the agency and the person submitting the data cannot reach a solution would the enforcement agency be contacted. The intent of this program is to ensure that accurate data are collected without being overly burdensome on industry for unintended errors.

4. Describe any tests of procedures or methods to be undertaken. Tests are encouraged as effective means to refine collections, but if ten or more test respondents are involved OMB must give prior approval.

The Council appointed an industry technical committee that met in 2001 and 2002 to review and recommend data to be collected in the EDRs. While this did not result in a formal pretest of the data reports, representatives from each fishery and the crab processing sectors participated in seven day-long meetings during that period. Responses from those meetings resulted in draft EDR data forms referenced in the P. L. No. 108-199. Following congressional action on P. L. No. 108-199, a focus group meeting consisting of a small number (less than a total of ten) of industry participants was held at the AFSC. Participants in the focus group met to evaluate the draft data forms and identify the optimum years between 1998 and 2004 from which to select historical data from each of the four crab sectors. As a result of the review, several data forms were significantly revised.

Since the EDR program has been in place, informal testing has taken place by meeting with EDR submitters to discuss ways in which the forms used to request information could be improved. The accountants that perform the data quality audits, as well as PSMFC (who administers the data collection) also document ways in which the EDRs could be clarified and we have used this information to clarify instructions and variable definitions.

5. Provide the name and telephone number of individuals consulted on the statistical aspects of the design, and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

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