SUPPORTING STATEMENT
AMENDMENT 80 ECONOMIC DATA REPORT FOR THE CATCHER/PROCESSOR NON-AFA TRAWL SECTOR
OMB CONTROL NO.: 0648-xxxx

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

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 will be a maximum of 28 non-AFA trawl catcher/processors (see Table 1) operating in the waters of the BSAI and GOA. Non-AFA trawl catcher/processors are a closed set that include those catcher/processors not listed as AFA catcher/processors at 50 CFR 679.4(l)(2)(i). Each catcher/processor would have one Amendment 80 QS permit and LLP license holder required to collect and report all data on an Amendment 80 EDR. While a maximum of 28 licensees could be required to report in this collection in the first year of the proposed Amendment 80 program, owners of multiple licenses and associated vessels will be required to submit one report for each license/vessel, reducing the respondent universe but not the overall reporting burden. In addition, in subsequent years some consolidation in this sector could occur, reducing the number of entities required to respond to the EDR.

This collection would require each QS holder for a non-AFA trawl catcher/processor to submit an annual EDR, which is a single form design with identical fields. If the final rule for this action is approved by the Secretary of Commerce in 2007, year 2008 would be the first full year of data that would be required for the Amendment 80 EDR. The data (EDR and responses to questions) for 2008 would be required by July 2009. Each subsequent year of catch and production would require a new EDR.

Table 1. Non-AFA trawl catcher/processor sector, 2007

Vessel Name	Vessel Name
F/V Alaskan Rose (Tremont)	F/V Arica
F/V Arctic Rose (Sunk 2001)*	F/V Cape Horn
F/V Seafisher	F/V Rebecca Irene
F/V Alaska Juris	F/V Unimak Enterprise
F/V Alaska Voyager	F/V Vaerdahl
F/V Alaska Victory	F/V Alliance
F/V Alaska Warrior	F/V Legacy
F/V Alaska Ranger	F/V Bering Enterprise
F/V Alaska Spirit	F/V Harvester Enterprise
F/V American #1	F/V Ocean Peace
F/V US Intrepid	F/V Seafreeze Alaska
F/V Defender	F/V Ocean Alaska (Beagle)
F/V Enterprise	F/V Golden Fleece
F/V Constellation	
F/V Prosperity	

The Arctic Rose may be replaced by one additional LLP that could be assigned to a new Vessel

The sample selection method is an annual census of all 28 vessels, as any other sampling methodology would produce too few observations to estimate representative levels of cost, earnings, and other outputs required for this collection.

As this program is a mandatory collection, and valuable fishing privileges will be withheld if an EDR is not submitted, we anticipate a 100% response rate from QS holders. Quota shares in this program will be issued to entities, rather than vessels, and specific provisions in the rule require that each QS holder is responsible for including data from any acquired vessel in this sector.

Also, each of these vessels is classified as a large entity with greater than $4.0 million in annual gross earnings. The organizations owning and managing these vessels routinely provide NMFS extensive data on catch by location and weight as well as production data to both NMFS and the State of Alaska through logbooks, catch account reports, and other collections. The long history of this sector in providing mandatory data reinforces the expectation that this data will be provided by all vessels in this program.

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.

Given that only 28 vessels will be participating in this fishery, it is not feasible to generate enough observations on any one of the variables without applying this collection annually. And, as discussed above, random sampling from this population is not a viable option for statistical reasons. Based upon the degrees of freedom and number of observations required for estimating the statistical relationship among the variables in this collection, data in the Amendment 80 EDR may be pooled to create a time-series of cross-sectional data in order to generate sufficient observations for economic and statistical analysis. Although the strata to be utilized in preparing analyses (either deterministic or statistical) of management actions for this fleet will depend on the specific questions of interest, vessels are commonly stratified by vessel length and the distribution and amount of catch, by species.

a. Potential dependent variables and models developed with EDR data

Much of the data requested will be used to compute total or average quasi-rents (revenues less variable costs) based on a census of catcher/processors in the years following implementation of this rationalization program. To understand the relationships between the vessel quasi-rents and the variables we collect that affect total or average quasi-rents, econometric models will be required. Examples of some dependent and exogenous variables of interest are shown in the following table.

Examples of some dependent and exogenous variables of interest	
Estimating Dependent Variables that do not Require a Model	
a) Distribution of average catch and processed revenue by vessel length class, or type of operation (based on distribution and amount of catch by species)	Data Required Catch, production and revenue information, vessel information, and vessel owner information are required. COAR data would be used as the primary source for providing data on gross revenues paid by processing product and species.
b) Distribution of average variable vessel costs by vessel length class, or type of operation (based on distribution and amount of catch by species)	Data Required Total variable costs, by vessel, vessel characteristics, landings records Specific Measure Annual Total Variable Costs = CDQ costs + QS costs + observer costs + fuel + lube and hydraulics + food and provisions + freight costs for landed fish + lube and hydraulic fluid + crew payment or share payment + processing materials + labor costs for processing + packaging + freezing + captain's share payment + fish taxes (including raw fish and local tax) + gear costs Seasonal Variable Harvesting Costs = fuel costs + captain and crew costs + gear 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 length class, or type of operation (based on distribution and amount of catch by species)	Data Required Total variable costs, by vessel, vessel characteristics, landings records; COAR data would be the primary source for providing data on gross revenues paid by processing product and species Specific Measure Quasi-rents = Total revenue - (CDQ royalty payments + IFQ costs + fuel + lube and hydraulics + food and provisions + freight costs for landed fish + lube and hydraulic fluid + crew share payment + captain's share payment + fish taxes + processing materials + labor costs for processing + packaging + freezing) Quasi-rents / pounds landed = QR per pound Quasi-rents / days fished = QR per day
d) Seasonality of average catch and revenue by vessel class	Data Required Catch, processed revenue, vessel class and ownership.
e) Catcher processor vessel ownership & interest in QS	Data Required Processor, vessel and QS ownership data are required.
f) 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 are required. Specific Measures Labor Income = Crew share payment + Captain's share payment + QS holder's payments (where applicable) + processing labor payment + all other labor payment or Labor Income = Crew share * (Total revenue - CDQ leases - QS leases - fuel - lube and hydraulics - bait - food and provisions - freight costs for supplies - freight costs for landed & processed fish - fish taxes) + processing labor payment + all other labor payment Where applicable 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 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
g) Degree of involvement of non-AFA trawl catcher/processor sector in other AK fisheries	Data Required Catcher Processor and vessel ownership data, as well as total catch, production, and revenue data are required.
h) Observer Costs in QS Fisheries (Impacts of Increased Observer Coverage)	Data Required Cost per day-at-sea by individual. Number of days purchased per season from data collected by the observer program.
i) Total fishing and processing taxes including fee collection	Data Required/Specific Measures Taxes, use fees paid by catcher/processors
j) 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.
k) Product Recovery Rates (PRR) by species	PRR = Finished Pounds / Raw Pounds
l) Production	Production per Day = Finished Pounds / # of Processing Days Production Per Employee = Finished Pounds / # catcher/processor positions
m) Consolidation	Avg. Production per catcher/processor = total processed pounds / # of catcher/ processors producing groundfish.
n) Observer costs	Observer cost as percent of revenue= Observer costs / revenue Observer cost per day = Observer cost / # of processing days

b. Estimating Dependent Variables that Require a Model

AFSC analysts will use the data contained within the completed and verified EDRs to construct statistical models that characterize the determinants and factors affecting the costs and revenues of vessels within each stratum. The benefit of using statistical models to characterize the relationship between costs or revenues and the factors that influence them is that the models may initially be used to analyze the way in which economic performance changes after the immediate implementation of the program. If the Council makes adjustments to the program at a later date, analysts will be able to observe the changes in quasi-rents not attributable to the factors that have historically been the predominant statistical determinants to draw conclusions about the impact of the adjustments. That is, these statistical techniques can be used to disentangle the influence of particular economic variables on quasi-rents from "policy" or "management" variables that change directly as a result of managers' choices over policies or regulations. Examples of economic variables would be the prices of fuel, materials, or other inputs used in fishing and processing. Variables that can be altered directly by fishery managers or regulation are the length of fishery openings by statistical area and species, the amount of allocation of a species to a sector, or individual vessels or persons in a sector.

The data collected in the EDRs will be used to develop cost and quasi-rent (i.e., restricted profit) functions that characterize the relationships between fishing and processing activities and their economic impacts. In order to estimate such functions one needs vessel-level information on variable costs of operation and gross earnings. These variables will form the basis for the dependent part of the statistical model, while the other data collected on input quantities, catch, and prices will be used as exogenous variables. The analysts will determine the exact specification of the cost and quasi-rent functions based upon the questions desired by fishery managers, the number of observations available, and the perceived quality or accuracy of the collected data.

Econometric Methods. The primary and most common approach for estimating and specifying cost and quasi-rent functions is with econometric methods. This approach examines the multivariate statistical relationships between short- run costs or quasi-rents and exogenous variables, using choices or decisions made by economic agents over target species and fishing location. Observed behavior over time and strata may be merged with other data to infer how management actions impact quasi-rents. This analysis would include data on catch by species and area, data on the value of retaining catch of a given species, and data on species with lower market value. Error and regression statistics may be generated from econometric models to indicate the level of statistical significance of estimated parameters. Given the number of variables that could be included in any of these models, we are not prepared at this time to provide quantitative standards of accuracy for each parameter included in the EDR. The level of accuracy required in any given independent data value for estimating a particular dependent variable may vary greatly from one dependent variable to another.

Mathematical Programming Model. A second approach that could be used to characterize the relationship between costs or quasi-rents and economic variables would be a mathematical programming model. In this approach one makes an assumption about the way in which the variables are related, and conducts non-parametric tests on how well it explains the variation in quasi rents. Multilevel and multi-objective programming models have been used in fisheries to evaluate management policies. They may involve linear or non-linear programming, and would also generate uncertainty measures to evaluate the model accuracy.

3. Describe the methods used to maximize response rates and to deal with non-response. 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 QS holders operating a catcher/processor in this fishery will be required to submit an annual EDR. All of these respondents will be applying for one or more QS. Because this is a mandatory collection, and valuable fishing privileges will be withheld if an EDR is not submitted, we anticipate a 100% response rate from QS holders.

Measures to verify the accuracy of the EDR data would be developed by NMFS economists and analysts to ascertain anomalies, outliers, and other deviations from averaged variables. The principle means to verify data would be consultation between NMFS and the submitter when questions arise regarding data. NMFS would request oral or written confirmation of data submissions and request copies of or review documents or statements that would substantiate data submissions. The person submitting the EDR would need to respond within 20 days of the inquiry for information. Responses after 20 days could be considered untimely and could result in a violation and enforcement action.

NMFS would amend data in the EDR through this audit verification. NMFS could choose to audit an EDR either through random selection or when circumstances require more thorough review of the submissions. In instances where a random audit occurs or an audit is otherwise justified, NMFS may retain a professional auditor/accounting specialist who would review and request financial documents substantiating economic data that is questioned. NOAA guidelines for the Data Quality Act will be followed and estimates without an adequate statistical basis will not be used.

Enforcement of the data collection program will be 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 a QS 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 that persons submitting the data will have 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 due to unintended errors.

A discussion of four scenarios will be presented to reflect the analysts' understanding of how the enforcement program would function. The four scenarios are:

1. No information is provided on an EDR;
2. Partial information is provided on an EDR;
3. NMFS has questions regarding the accuracy of the data that has been submitted on an EDR; and
4. A random audit to verify the data does not agree with data submitted in the EDR.

In the first two cases, the person would be contacted by NMFS (or a NMFS contractor) and asked to fulfill his/her obligation to provide the required information. If the problem is resolved and the requested data are provided, no other action would be taken. If that person does not comply with the request, the collecting agency would notify enforcement that the person is not complying with the requirement to provide the data. Enforcement would then use their discretion regarding the best method to achieve compliance. Those methods would likely include fines or loss of quota and could include criminal prosecution.

In the third case, questions may arise when, for example, information provided by one company is much different than that provided by similar companies. These data would only be called into question when obvious differences are encountered. Should these cases arise, the agency collecting the data would request that the person providing the data double check the information. Any reporting errors could be corrected at that time. If the person submitting the data indicates that the data are accurate and the agency still has questions regarding the data, that firm's data could be audited. It is anticipated that the review of data would be conducted by an accounting firm selected jointly by the agency and members of industry. Only when that firm refuses to comply with the collecting agency's attempts to verify the accuracy of the data would enforcement be contacted. Once contacted, enforcement would once again use their discretion on how to achieve compliance.

In the fourth case, a random audit reports different information than that contained in the EDR. The audit procedure being contemplated is a verification protocol similar to that which was envisioned for use in the pollock data collection program developed by NMFS and Pacific States Marine Fisheries Commission (PSMFC). During the design of this process, input from certified public accountants was solicited in order to develop a verification process that is less costly and cumbersome than a typical audit procedure. That protocol involves using an accounting firm, agreed upon by the agency and industry, to conduct a random review of certain elements of the data provided.

Since some of the information requested in the EDRs may not be maintained by companies and must be calculated, it is possible that differences between the audited data from financial statements and EDR data may arise. In that case the person filling out the form would be asked to show how his/her numbers were derived. If the explanation resolves the problem, there would be no further action needed. If questions remained, the agency would continue to work with the providers of the data. Only when an impasse is reached would enforcement be called upon to resolve the issue. It is hoped that this system would help to prevent abuse of the verification and enforcement authority.

In summary, members of the non-AFA trawl catcher/processor sector will be contacted and given the opportunity to explain and/or correct any problems with the data, which are not willful and intentional attempts to mislead, before enforcement actions are taken. Agency staff does not view enforcement of this program as they would a quota monitoring program. Because these data are not being collected in "real" time, there is the opportunity to resolve occasional problems as part of the data collection system. The program will be developed to collect the best information possible. Analyses of the Amendment 80 rationalization program will be conducted, to minimize the burden on industry and minimize the need for enforcement actions.

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 held two industry meetings in 2006 to review and recommend data to be collected in the EDRs. While this did not result in a formal pretest of the data reports, several fields in the data forms were significantly revised. In addition, some members of the non-AFA trawl catcher/processor sector have voluntarily submitted individual comments on previous versions of this data form.

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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