

**SUPPORTING STATEMENT
WEST COAST GROUND FISH TRAWL ECONOMIC DATA
OMB CONTROL NO. 0648-xxxx**

A. JUSTIFICATION

1. Explain the circumstances that make the collection of information necessary.

This request is for a new information collection.

Participants in the West Coast groundfish trawl fishery managed by the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS), who must have a limited entry permit with a trawl endorsement, account for about 70% of groundfish landings (by revenue) on the West Coast of the United States (US). The fishery includes an at-sea whiting component (vessels which harvest and process whiting at sea), a shorebased whiting component (vessels which harvest whiting and deliver to shorebased processors), and a non-whiting groundfish component (all non-whiting groundfish is delivered by catcher vessels to first receivers or shorebased processors). The data collection program described in this document is designed to meet the requirements of the Pacific Fisheries Management Council's (PFMC) call for mandatory data collection as part of the implementation of individual fishing quota (IFQ) management in the West Coast groundfish trawl fishery. This mandatory data collection program is needed to meet the monitoring requirements of Section 303A(c)(1)(G) of the [Magnuson-Stevens Act](#) (MSA).

The limited entry trawl groundfish fishery is currently managed under a system of two-month trip limits by species, area restrictions, and gear restrictions. In January 2011, management of the groundfish trawl fishery will undergo dramatic change, with the current system of two month landing limits replaced by a IFQ (also referred to as limited access privilege program - LAPP) management regime. Participants in the at-sea whiting program will be able to form cooperatives for allocating harvest quota for whiting.

This change in regulation and MSA requirements for monitoring of LAPP programs makes the existing voluntary cost earnings data collection program in the limited entry trawl fishery inadequate. NMFS, in cooperation with the Pacific States Marine Fisheries Commission (PSMFC), has conducted two voluntary cost earnings surveys of catcher vessels delivering groundfish (including whiting) to shoreside processors. The first survey collected 2003 and 2004 data through in-person interviews from a census of limited entry trawl catcher vessel owners who made shoreside landings. The second survey collected 2007 and 2008 data from the same survey population during 2009.¹ These two surveys used similar questionnaires and fielding protocol, and each obtained a responses rate between 65% and 70%. The NMFS and PSMFC have not conducted economic cost earnings surveys of vessels participating in the at sea whiting fishery (catcher vessels who do not also deliver to shoreside processors, motherships, catcher-processors), or first receivers and shorebased processors.

¹ Both previous limited entry of the limited entry trawl catcher vessels delivering to shoreside processors were conducted under OMB Control No. 0648-0369.

Early in its consideration of an IFQ management regime for the West Coast groundfish trawl fishery, the PFMC enumerated goals for the program. These goals include:

- 1) Provide for a viable, profitable, and efficient groundfish fishery.
- 2) Increase operational flexibility.
- 3) Minimize adverse effects from an IFQ program on fishing communities and other fisheries to the extent practical.
- 4) Promote measurable economic and employment benefits through the seafood catching, processing, distribution elements, and support sectors of the industry.
- 5) Provide quality product for the consumer.
- 6) Increase safety in the fishery.

These goals are an important consideration in the development of the data collection program, as the MSA includes provisions for monitoring the progress of catch share programs in meeting program goals. Section 303A(c)(1)(G) states that any limited access permit program (LAPP) shall:

include provisions for the regular monitoring and review by the Council and the Secretary of the operations of the program, including determining progress in meeting the goals of the program and this Act, and any necessary modification of the program to meet those goals, with a formal review 5 years after the implementation of the program and thereafter to coincide with scheduled Council review of the relevant fishery management plan (but no less frequent than once every 7 years).

In order to meet the monitoring requirements of the MSA, it is necessary to have economic data on all harvesters, first receivers, and processors participating in the West Coast groundfish fishery. This includes (i) catcher vessels (delivering to shoreside processors and/or motherships), (ii) motherships, (iii) catcher-processors, and (iv) first receivers/shorebased processors. A survey questionnaire has been developed for each of these four groups within the survey population.

2. Explain how, by whom, how frequently, and for what purpose the information will be used. If the information collected will be disseminated to the public or used to support information that will be disseminated to the public, then explain how the collection complies with all applicable Information Quality Guidelines.

How Information Will Be Used

Information received from this survey will be used to calculate economic performance measures and support the regional economic impact model developed by the Northwest Fisheries Science Center (NWFSC): Input-Output Model for Pacific Coast Fisheries, or IO-PAC. While the calculation of some economic performance measures involves the use of statistical inference to develop values which are representative of the desired population (as even with mandatory data collection, there may be a few non-respondents) and the development of other economic performance measures requires the development of economic and econometric models. Examples of economic performance measures for vessels harvesting fish based on statistical inference of survey variables include calculation of expenditures for each input, calculation of total costs incurred when operating the vessel (which include not only expenditures for inputs but also other

expenditures such as the purchase/leasing of permits and quota), calculation of total revenue earned through operation of the vessel, quasi-rent (total revenue minus variable costs) earned by the vessel, vessel operating characteristics (speed and fuel use), crew size, and crew compensation methods (what share of revenue is paid to the crew and which expenses are deducted from landings revenue before the crew is paid). Performance measures which require the estimation of economic models using the data collected by the survey include efficiency of operation and average cost curves for different length vessels (which provide the level of harvest output at which a specific length vessel minimizes its cost per pound of fish landed).

Many of these performance measures have been estimated using data from the two voluntary cost earnings surveys already conducted with the limited entry trawl fleet of catcher vessels. Data from the first survey was used to analyze the expected effect of implementing a catch share program on the number of vessels, harvesting costs, economic rent, and profits earned by members of limited entry trawl fleet. This analysis has been published in the *Journal of Marine Economics* and provides the economic analysis used in the Environmental Impact Statement being prepared as part of the catch share implementation process.²

Data from the voluntary cost earnings surveys of the limited entry trawl fleet has also provided expenditure data used in the IO-PAC developed by the NWFSC. Cost earnings survey data provides data on vessel expenditures by cost category (captain, crew, fuel, etc.) which drives the estimates of how changes in landings affect coastal economies. Estimates from IO-PAC are used in the PFMC's annual groundfish specifications process, which sets allowable landings levels by groundfish species and gear type.

While data collected through voluntary surveys of the catcher vessels participating in the limited entry trawl fishery have allowed NWFSC economists to perform analysis used in fisheries management and published in peer reviewed journals, the scope of analysis has been constrained by not having data on processors as well as all harvesters. The mandatory surveys presented in this request will not only allow the type of analysis which has already been performed to be continued, but will allow expanded analysis due to the availability of data for the processing as well as the harvesting sector. Because survey plans call for collecting two years (2009 and 2010) of data prior to the implementation of catch share management as well as data on an annual basis after the implementation of catch share management, it will be possible to determine how the implementation of catch share management has affected the size and distribution of economic benefits accruing to the harvesting and processing sectors in the limited entry trawl groundfish fishery as well as regional economic impacts.

Who Will Use the Data

Information collected in this data collection will be used by economists at the NWFSC and their contractors. While some analysis performed by contractors will require that they have access to survey data for individual vessels or processing plants, all identifying information (such as vessel ID, owners name, vessel name, processing plant address, etc.) will be removed from the data before it is provided to contractors hired by the NWFSC. Individual vessel and processing plant

² See Lian, C., R. Singh, and Q. Weninger, Fleet Restructuring, Rent Generation, and the Design of Individual Fishing Quota Programs: Empirical Evidence from the Pacific Coast Groundfish Fishery, *Marine Resource Economics*, Volume 24, Number 4, January 2010, pp. 329-359 for this analysis.

data with the identifying variables removed will be distributed to contractors hired by the NWFSC when necessary to complete work required of NMFS. Summaries of the data will be produced each year and made available to the general public. These summaries will contain aggregated data (with each variable provided to the public based on responses received from at least three distinct economic units).

How Frequently Will the Information be Used?

Performance measures will be calculated and inputs for the IO-PAC regional economic model will be updated annually. In the early years of the catch share program, the NMFS expects to prepare annual reports with summary statistics for cost categories, sources of revenue, quasi-rents, and the share of fishery economic benefits accruing to various economic agents operating within the fishery (vessel owners, captain, crew, processing plant owners, and processing plant employees). Information on expenditures by harvesters and processors will also be incorporated into the NWFSC's IO-PAC regional economic model on an annual basis. The performance measures prepared on an annual basis will also be used to determine if the IFQ program is meeting the goals identified by the PFMC.

Economists at the NMFS also expect to continue a research program examining the impact of catch share programs on fleet structure, production costs, employment, generation and distribution of economic rent, and regional economic impacts. This work will be done on an on-going basis, with analytical results updated as new data becomes available. Results from this project will be used in the PFMC management process and may be published in peer reviewed journals.

For What Purposes Will Survey Information Be Used?

Data will be collected to monitor the economic impact of implementing an IFQ management regime as well as to answer other economic questions which require knowledge of the costs, revenues, physical characteristics, and compensation methods used by harvesters and processors in the West Coast limited entry trawl groundfish fishery. Meeting the monitoring requirements enumerated in section 303A.(c)(1)(G) of the MSA will require NWFSC economists to determine the efficiency of operations, whether operations are exhibiting economies or diseconomies of scale, expenditures on inputs including labor and (for harvesting vessels) fuel, quasi-rents (the difference between revenue and variable costs), and economic impacts on fishing communities. Data collected under this collection will be used in developing the report on catch share management impacts which is legally mandated after 5 years of catch share management by the MSA. Analysis based on this data will not only meet legal requirements, but will also provide information to guide the PFMC in making decisions regarding revisions to the structure of the catch share system used to manage the West Coast limited entry groundfish trawl fishery.

As explained in the preceding paragraphs, the information gathered has utility. NOAA will retain control over the information and safeguard it from improper access, modification, and destruction, consistent with NOAA standards for confidentiality, privacy, and electronic information. See response to Question 10 of this Supporting Statement for more information on confidentiality and privacy. The information collection is designed to yield data that meet all applicable information quality guidelines. Prior to dissemination, the information will be subjected to quality control measures and a pre-dissemination review pursuant to [Section 515 of Public Law 106-554](#).

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology.

Survey questionnaires will be submitted on paper. Electronic submission of questionnaires will not be an option for survey respondents. Discussions with members of the survey population revealed low interest in electronic submission of Electronic Data Collection (EDC) forms.

While the EDC form will be submitted on paper, the form will be available for downloading, filling and printing on the NWFSC website (www.nwfsc.noaa.gov). The four EDCs for catcher vessels, motherships, catcher-processors, and first receivers/shorebased processors will be posted on the website. Summaries of survey results presenting cost, revenue, physical characteristics, and input compensation methods will also be posted annually on the NWFSC website.

4. Describe efforts to identify duplication.

The four questionnaires developed for different groups (catcher vessels, catcher-processors, motherships, and first receivers/shorebased processors) within the survey population build upon the questionnaire used by the NMFS for two previous voluntary surveys of catcher vessels making shoreside deliveries in the West Coast limited entry trawl fishery. Like those earlier voluntary questionnaires, these four questionnaires have been reviewed with personnel from the NWFSC, the Northwest Regional Office (NWR), Pacific States Marine Fisheries Commission (PSMRC), and industry participants. Five years of experience using data from the two previous voluntary surveys has not revealed any duplication of data available from other sources. Extensive review of the questionnaires with owners of catcher vessels, catcher-processors, motherships, and first receivers/shorebased processors has not revealed any questions on the questionnaires which could be answered through the use of existing data sources.

5. If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.

Based on available information, the NMFS believes that all of the catcher vessels in the survey population qualify as small businesses. Existing (non-survey) data sources do not provide information on all potential revenue sources for catcher vessels participating in the West Coast limited entry trawl fishery (in particular, NWFSC staff do not have access to revenue data from Alaska fisheries). However, survey responses to two previous voluntary surveys of catcher vessels delivering to shoreside processors indicate that all of these vessels are small businesses. Revenue data is not available for all operations (West Coast and Alaska) of catcher-processors and motherships. Similarly, revenue data is not currently available for individual shoreside processing plants.

Two methods have been used to minimize survey burden on all members of the survey population, including small businesses. First, survey design has sought to avoid duplication of data collection (discussed in the response to Question 4). Second, NMFS economists have met with industry participants to discuss all four questionnaires. These discussions have focused on making questions easily understandable and consistent with the record keeping practices of survey

respondents. These meeting with industry participants have resulted in numerous improvements in survey content and clarity.

6. Describe the consequences to the Federal program or policy activities if the collection is not conducted or is conducted less frequently.

Failure to conduct this survey would limit NMFS economists to using currently available data in order to monitor the impact of the catch share management. While it would still be possible to monitor changes in revenue earned by catcher vessels, there would be no information available on production costs or on the processing sector. No evaluation of the economic benefits, distributional impacts, or efficiency effects of catch share management could be made. It would not be possible to evaluate if catch share management was achieving many of the goals identified by the PFMC. As a result, MSA monitoring requirements as stated in section 303A(c)(1)(G) could not be met.

In addition to not being able to meet MSA monitoring requirements, NMFS economists would not be able to produce analysis evaluating the need for modifications to catch share program design and regulation. For example, evaluating the potential need to revise caps on quota share or quota pound accumulation requires knowledge of how much fish vessels of different sizes (lengths) must harvest in order to minimize cost per pound of fish harvested. In order to determine the level of catch at which a vessel minimizes cost per pound, it is necessary to have the cost data collected by this survey. With this cost data, NMFS economists can advise the PFMC on the catch levels and quota accumulation limits needed to minimize harvesting costs.

Conducting data collection less frequently would slow the delivery of results from the economic monitoring process. Even with annual data collection, the evaluation results of regulatory changes made at the beginning of 2011 will not be available until the end of 2012. Collection of data for 2011 will not occur until mid-2012 (discussions with industry participants emphasized the importance of collecting economic data after industry participants have prepared data for tax filings), and the data verification and matching (with other data sources which provide data used in conjunction with the cost earnings data collected by this survey) process will take additional time. As a result, the economic impact of a regulatory change that takes effect at the beginning of 2011 is not known until the end of 2012 even with annual data collection. If economic analysis of the cost earnings data indicates unanticipated consequences of the regulatory change, additional time is needed in the Council process to discuss and recommend regulatory changes. The consequence of collecting cost earnings data less frequently than the annual basis proposed in this filing is to allow unanticipated consequences of regulatory changes to persist for needlessly extended periods of time.

7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.

This information collection is consistent with OMB guidelines.

8. Provide information on the PRA Federal Register Notice that solicited public comments on the information collection prior to this submission. Summarize the public comments received in response to that notice and describe the actions taken by the agency in response to those comments. Describe the efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

This request is being submitted in associated with Proposed Rule 0648-AY68, which will be published for public comment coincident with this request.

As stated in Question 5, NMFS economists have met with industry participants to discuss all four questionnaires.

9. Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.

No payments or gifts will be provided to survey respondents.

10. Describe any assurance of confidentiality provided to respondents and the basis for assurance in statute, regulation, or agency policy.

As stated on the forms, responses to this information request are confidential under 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 the confidentiality of fishery statistics.

The NMFS will not publish any numbers based on fewer than three survey responses in papers, reports, presentations, or other public documents. Only NWFSC employees will have access to the survey data with information that can be used to identify individual respondents (vessel ID number, owner name, owner address, etc.). Consultants hired by the NMFS may have access to individual observations in the survey data, but only with all variables removed from the data set that identify the respondent (such as vessel Coast Guard ID, vessel name, vessel owner's name, vessel owner's contact information, processing plant address). In the case of a Freedom of Information Act (FOIA) request for the data, the NMFS will seek to protect the data from release through Exemption 4 by noting the data is confidential and highly sensitive business data.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.

No sensitive questions of a personal nature will be asked.

12. Provide an estimate in hours of the burden of the collection of information.

The survey population includes (based on 2009 data) 168 catcher vessels, 9 catcher-processors, 7 motherships, and 84 first receivers/shoreside processors. These 268 members of the survey

population will each need 8 hours to complete the EDC for one year of data. As a result, collecting historical data from one previous year will require a total of 2,144 hours to complete all 268 EDC forms. During 2011, each of the 268 members of the survey population will be required to submit an EDC for 2009 and an EDC for 2010. A total of 4,288 burden hours (2,144 x 2) will be required by all survey respondents during 2011 to complete an EDC with 2009 data and an EDC with 2010 data. During 2012, each of the 268 members of the survey population will be required to submit and EDC for 2011 data, a total of 2,144 burden hours. During 2013, each of the 268 members of the survey population will be required to submit an EDC with 2012 data, a total of 2,144 burden hours. **Each year, 268 unduplicated respondents will submit reports. Annualized responses will be $536 + 268 + 268 = 1,072/3 = 357$. Annualized burden hours over the three-year period will be 357×8 (reporting: 7 hours and 45 minutes and recordkeeping, 15 minutes) = 2,856.**

Labor Costs

Previous experience with voluntary cost earnings surveys of catcher vessel owners and discussions with industry participants during the development of these mandatory questionnaires indicates that catcher vessel economic data collections (EDCs) will typically be filled out by the vessel owner. However, staff accountants will typically fill out EDCs for motherships, catcher-processors, and shorebased processing plants.

The most recent voluntary cost earnings survey of the limited entry groundfish trawl fleet conducted by the NMFS indicated that the average annual captain salary was \$81,100. This is equal to \$38.99 per hour for a 2,080 hour work year. As a result, the cost to catcher vessels of having the captain (who is usually the vessel owner) spend 8 hours to complete the survey is \$311.92. The 168 catcher vessels will spend a total of \$52,403 on labor costs to complete EDC forms for a single year of data collection. In 2011, when data for 2009 and 2010 is collected, the labor cost to catcher vessels will be \$104,806. In 2012, when data for 2011 is collected, the labor cost to catcher vessels will be \$52,403. In 2013, when data for 2012 is collected, the labor cost to catcher vessels will be \$52,403.

The average accountant earns a salary of \$56,651, which is equal to \$27.24 per hour.³ There are 100 motherships, catcher-processors, and first receivers/shorebased processors who will use 8 hours of accountant labor each to complete this survey. Each of the 100 motherships, catcher-processors, and first-receivers/shorebased processors will spend \$217.96 to complete the survey. In total, the 100 motherships, catcher-processors, and first receivers/shorebased processors will spend \$21,796 in labor costs to complete ECD forms for one year of data submission. In 2011, preparing EDC forms for 2009 and 2010 will cost a total of \$43,592. In 2012, preparing EDC forms for 2011 will cost motherships, catcher-processors, and first-receivers/shorebased processors a total of \$21,796. In 2013, preparing EDC forms for 2012 will cost motherships, catcher-processors, and first receivers/shorebased processors a total of \$21,796.

Total labor expenses for catcher vessels, catcher-processors, motherships, and first receivers/shorebased processors will be \$148,398 in 2011, \$74,199 in 2012, and \$74,199 in 2013. **Over the three years of data collection, the average annual labor cost to survey respondents is \$98,932.**

³ Information on the average accountant salary is taken from the U.S. Census American Community Survey for 2008.

13. Provide an estimate of the total annual cost burden to the respondents or record-keepers resulting from the collection (excluding the value of the burden hours in Question 12 above).

The only costs not covered in Question 12 are those for making copies of EDC documents, retaining copies of EDC documents (survey respondents are requested to retain a copy of the completed EDC form), and mailing the completed EDC to the NWFSC. These costs are expected to be \$20 per EDC form submitted. Total costs of copying and submitting EDC forms for all respondents will be \$10,720 ($\$20 \times 2 \times 268$) in 2011, \$5,360 ($\20×268) in 2012, and \$5,360 ($\20×268) in 2013. **During the three year period from covered by this request, the annual average expenditure by all survey respondents for copying, storage, and mailing is $357 \times \$20 = \$7,140$.**

14. Provide estimates of annualized cost to the Federal government.

The NMFS expects to hire one new employee as a result of this mandatory data collection. This new employee will work full time on data collection, verification, and analysis for the West Coast limited entry trawl groundfish survey. Assuming an annual salary of \$65,000 and a 40% benefit load, this employee will cost the federal government \$91,000 annually for salary and benefits. Annual costs for printing and mailing related to the survey are expected to be \$2000. The total annual costs incurred by the federal government as a result of implementing this survey are thus \$93,000.

15. Explain the reasons for any program changes or adjustments.

This is a new collection.

16. For collections whose results will be published, outline the plans for tabulation and publication.

NMFS is requiring submission of the EDC by September 1 of each year. The NMFS expects to have a public report available by the following June 1. This report will summarize information collected on costs by category, earnings by category, vessel and plant physical characteristics, and compensation to labor inputs (crew on vessels and line workers in processing plants). All reported values will be based on responses from at least three different economic entities so as to preserve confidentiality.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons why display would be inappropriate.

Not applicable.

18. Explain each exception to the certification statement.

There are no exceptions.