

**SUPPORTING STATEMENT  
WEST COAST GROUND FISH TRAWL ECONOMIC DATA  
OMB CONTROL NO. 0648-0618**

**A. JUSTIFICATION**

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

This request is for a revision of a current information collection.

Individual fishing quotas for the West Coast groundfish trawl fishery, otherwise known as Trawl Rationalization, was implemented in January 2011 by the Pacific Fisheries Management Council. The management system changed from a system of two-month trip limits by species, area restrictions, and gear restrictions to an Individual Fishing Quota (IFQ) management regime. In addition to the IFQ management regime, participants in the at-sea whiting program have formed cooperatives for allocating harvest quota for whiting.

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). Requirements are codified in [50 CFR Part 660](#).

Participants in the West Coast groundfish trawl fishery, 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 (U.S.). The fishery includes an at-sea whiting component (vessels that harvest and process whiting at-sea), a shorebased whiting component (vessels that 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).

In 2011, baseline data for the 2009 and 2010 fishing seasons were collected from 1) owners, lessees, and charters of catcher vessels with limited entry trawl permits during the baseline period, 2) catcher processors and motherships that harvested or processed fish during the baseline period, and 3) buyers and processors that received groundfish caught by a catcher vessel with a limited entry trawl permit. In 2012 and subsequent years, there will be an annual data collection.

In its consideration of an IFQ management regime for the West Coast groundfish trawl fishery, the PFMC enumerated the following goals for the program:

- 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 economic data collection program, as the Magnuson-Stevens Act (MSA) includes provisions for monitoring the degree to which the goals have been met. Section 303A.(c)(1)(G) states that any limited entry 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 continue to have economic data on all catcher vessels, catcher processors, motherships, and first receivers/shoreside 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 was developed for each of these four groups.

Revision:

Based on review of the completed economic data collection (EDC) forms submitted for the 2009 and 2010 operating years as well as discussions with survey respondents, the National Marine Fisheries Service (NMFS) has modified the four forms which are used in this information collection. The majority of these modifications serve to clarify instructions and make the requests for information more consistent with the accounting and bookkeeping systems used by survey recipients. The changes to the forms include:

- Catcher Vessels
  - All owners, lessees, and charterers of a catcher vessel registered to a limited entry trawl endorsed permit at any time in 2011 (for 2011 collection) will be required to complete the entire form, regardless of whether fish were harvested with the vessel.
  - Dates of lease of vessel are now requested.
  - In addition to providing month and date of start of fiscal year, respondents are now requested to provide the year.
  - Additional categories (based on suggestions from respondents) were added to questions 17 (earnings sources), 22 (expenses), 24, and 25 (both: types of shares).

- Catcher Processors
  - All owners, lessees, and charterers of a catcher processor vessel registered to a catcher processor permit at any time in 2011 (for 2011 collection) will be required to complete the entire form, regardless of whether fish were harvested by the vessel.
- Motherships
  - All owners, lessees, and charterers of a mothership vessel registered to a mothership permit at any time in 2011 (for 2011 collection) will be required to complete the entire form, regardless of whether fish were received or processed by the vessel.
- First Receivers/Shoreside processors
  - All owners of a first receiver site license in 2011 (for 2011 collection) and all owners and lessees of a shorebased processor that received round or headed-and-gutted IFQ species groundfish or whiting from a first receiver in 2011 (for 2011 collection) will be required to complete the entire form regardless of whether fish were received or processed.
  - Additional categories were added to questions 12 (utilities) and 17 (other expenses).
  - The form now asks about the source of seafood purchases, which are broken into the categories of West Coast, Alaska, Canada, and Other (question 18).
  - The sources of fish purchases in question 19 were modified from LE Trawl, Fixed Gear, and Other Sources to LE Trawl Vessels, LE Fixed Gear Vessels, Open Access Vessels, and Non-Vessel Sources
  - Bait was added to Other Non-Species Specific Products in question 20.

In Question 19 in all surveys, the definitions of product sources and payment categories were modified for clarity.

*A chart listing each question that was changed, the change, and the reason for it, is included with this submission, under supplementary documents.*

Also, the collection of historical data in the first year of this information was a one-time requirement, and the responses, hours and recordkeeping/reporting costs have been reduced accordingly.

**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 (Input-Output Pacific Coast, or IO-PAC). While the calculation of some economic performance measures involves the use of statistical inference to develop values that are representative of the desired population (as even with mandatory data collection, there may be

some non-respondents) and the development of other economic performance measures requires the development of economic and econometric models. Examples of economic performance measures 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, variable profit (total revenue minus variable costs), 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 that require the estimation of economic models include efficiency of operation and average cost curves for different length vessels (that 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 previously 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 regarding the number of vessels, harvesting costs, economic rent, and profits. 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.<sup>1</sup>

Data from the voluntary cost earnings surveys of the limited entry trawl fleet has also provided expenditure data used in the Input-Output Model for Pacific Coast Fisheries (IO-PAC) developed by the Northwest Fishery Science Center (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 regional economies and coastal economies. Estimates from IO-PAC are used in the PFMF'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 catcher processors, motherships, or first receivers/shoreside processors. 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 shore-based processing, the at-sea fleet, as well as the harvesting sector. Because the data collection program covers both pre and post catch share implementation, it will be possible to determine how catch share management has affected the size and distribution of economic benefits from the fishery.

### 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

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<sup>1</sup> 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.

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 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?*

Both the economic performance measures and 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 catcher vessels, catcher processors, motherships, and first receivers/shoreside 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 catcher vessels, catcher processors, motherships, and first receivers/shoreside 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.

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.**

Surveys will be mailed to the participants; enclosed in the survey packet will be information about how to download electronic files. Survey participants will have the option to complete either the paper survey or fill in a pdf version of the survey that will be made available at [www.nwfsc.noaa.gov/edc](http://www.nwfsc.noaa.gov/edc). Participants that completed and printed an electronic pdf should submit it through the mail.

The four EDCs questionnaires (catcher vessels, motherships, catcher processors, and first receivers/shorebased processors) will be posted on the Web site. Summaries of survey results presenting cost, revenue, physical characteristics, and input compensation methods will also be posted annually on the NWFSC Web site once the data are available.

**4. Describe efforts to identify duplication.**

To the best of our knowledge, based on extensive interactions with the survey population and fishery managers regarding this data collection, this is the only source for this data. 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, the processing sector, motherships, or catcher processors. 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 303(c)(1)(G) could not be met.

In addition, 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. Data from this collection are also necessary to evaluate the distributional consequences of catch share management, and the effects on regional economies. These are issues that fishery managers may wish to address by adjusting the catch share program.

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 PFMC 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.**

A Federal Register Notice published on December 5, 2011 (76 FR 75873) solicited public comment. No comments were received.

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.**

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.**

Not Applicable.

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

The survey population for 2011 data (collected in 2012) consists of 178 catcher vessels, 10 catcher processors, 7 motherships, and 57 first receivers/shoreside processors. These 252 members of the survey population will each need 8 hours to complete the EDC questionnaire. As

a result, one year of data collection will require a total of 2,016 hours to complete the forms each year.

Experience with the 2009 and 2010 EDC surveys 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 178 catcher vessels will spend a total of \$55,522 on labor costs to complete EDC forms for a single year of data collection.

The average accountant earns a salary of \$59,243, which is equal to \$28.48 per hour.<sup>1</sup> There are total of 74 motherships, catcher processors, and first receivers/shorebased processors who will use 8 hours of accountant labor each to complete this survey. Each of the 74 entities will spend \$227.86 to complete the survey. In total, these entities will spend \$16,861 in labor costs to complete EDC forms for one year of data submission.

Total labor expenses for catcher vessels, catcher-processors, motherships, and first receivers/shorebased processors will be \$55,750 in 2012.

**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 (survey respondents are requested to retain a copy of the completed EDC form) and mailing the surveys. The annual cost associated with these activities is assumed to \$20 per respondent, assuming that the form is sent via certified mail. Total annual costs for all respondents will be \$5,040 (252 X \$20).

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

NMFS hired one new employee in July, 2011, as a result of this mandatory data collection. This new employee works full time on data collection, verification, and analysis for the West Coast limited entry trawl groundfish survey. Assuming an annual salary of \$78,000 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 plus ongoing database development and administration costs amounting to \$20,000. The total annual costs incurred by the federal government as a result of implementing this survey are thus \$131,200.

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<sup>1</sup> Information on the average accountant salary is taken from the U.S. Census American Community Survey for 2010.

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

**Program Changes:**

Based on review of the completed economic data collection (EDC) forms submitted for the 2009 and 2010 operating years as well as discussions with survey respondents, the NMFS has modified the four forms which are used in this information collection. These modifications clarify instructions and make the requests for information more consistent with the accounting and bookkeeping systems used by survey recipients. However, the time to complete each form remains 8 hours.

The collection of historical data required in the original request was a one-time requirement. This removes 268 one-time responses (annualized to 89 responses) and 712 annual hours. Recordkeeping and reporting costs have been reduced proportionately, by 89 x \$20 or \$1,780.

**Adjustment:**

There are 16 fewer respondents than for the previous submission, so there is an additional reduction of 16 responses and 128 hours. This results in further decrease in recordkeeping/reporting costs, of \$20 x 16 or \$320.

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

NMFS continues to require submission of the EDC by September 1 of each year. NMFS expects to have a public report available by the following August 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.