

SUPPORTING STATEMENT
U.S. Department of Commerce
National Oceanic & Atmospheric Administration
Pacific Coast Groundfish Fishery Rationalization Social Study
OMB Control No. 0648-0606

A. JUSTIFICATION

The Northwest Fisheries Science Center (NWFSC) is requesting approval for a continued collection of information on social and cultural impacts to members of the fishing industry whom are involved in a rationalization program for the Pacific trawl groundfish and whiting fisheries.

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

The Pacific Fisheries Management Council (PFMC) per the Magnuson Stevens Fisheries Conservation and Management Act (reauthorized 2007) (MSA) P.I. 109-479, sec. 302.f, implemented a rationalization program for the Pacific trawl groundfish and whiting fisheries in January 2011. Changes in how fisheries are managed not only results in changes in stock assessments, stock abundance, and species recovery, but also results in changes to the people and communities within the fishery.

Scientific literature extensively discusses the impacts rationalization programs have on fishing communities and fishermen (Olson 2011, McCay 1995, Ecotrust 2004, Lowe and Carothers 2008, NRC 1999, Petursdottir and Palsson 1996, Carothers 2013, Russell et al. 2016, Carothers 2015, Russell, Van Oostenburg, and Vizek 2018, Pinkerton and Edwards 2009). Social and cultural changes to fishermen, processors, and other industry members, such as net suppliers, are probable. Rationalization results such as consolidation and increased efficiency have benefits to the catch, but may have consequences on the people involved in the fishery. The extent of the social and cultural changes is correlated to the specific characteristics of the fishery being rationalized. This research will collect post-rationalization time series data. The Pacific Coast Groundfish Fishery Social Study (PCGFSS) will represent a continued data collection per the study's design. It will allow for the comparison of newly collected data to previously collected data and the identification and measurement of social and cultural changes that are related to the rationalization of the fishery.

Ongoing data collection is warranted as the management of the fishery is ongoing, complex, and issues are evolving and changing. Continuing advances in technology to include electronic monitoring, recovery of specific species, and any outcomes from current litigation, all have the potential to continue to change the sociocultural impacts to the people and communities participating in this fishery. Monitoring how these changes impact communities provides information of how to take action to support sustainable resilient coast communities. Understanding and supporting resilient coastal communities has become a priority at high levels within the National Marine Fisheries Service (NMFS).

In addition to understanding impacts within this fishery, the potential to gain more information

for other fisheries managed by the Pacific Fisheries Management Council (PFMC) is high. It is known that many fishermen diversify their fishing activity across more than one fishery. This research effort will collect data to show the movement of individuals between different fisheries. Where appropriate, data obtained can then be applied to other fisheries, contributing further to the utility of this research. In the event future fisheries are considered for rationalization, this research effort has and may continue to inform future management.

Baseline data was collected prior to the management change. Continued data collection is critical to the ability to show how the fishery changes. Without the supplemental time series data, the previous data collections will be useful, but will limit the ability to show explicit and unique social changes in the system. This research will be most complete, and will provide the greatest amount of information about social and cultural characteristics of this fishery, if continued to be conducted over time.

To achieve these goals, baseline data was collected in the year prior to the implementation of the catch shares program. A second research effort collected data in 2012, the second year post-implementation, and a third round of data was collected in 2015/2016 approximately a year after quota shares were released for trading. While the initial data collections were related to the implementation and release of quota shares, the additional collections will move to a 5-year cycle based on the 2015/2016 data collection effort. This request for an additional three-year approval would secure the time-series data collection for continued monitoring of social changes in this fishery. This will also allow for the identification of social changes as a result of continued changing management actions such as the testing of electronic monitoring as well as the recovery of multiple of the species, the continued heating of the ocean waters referred to as the “Blob”, and correlated increased bio-toxins that have all impacted fisheries (Richerson and Holland 2017, Leising et al. 2015, Du et al. 2015, McCabe et al. 2016, Fisheries 2018). This will also provide the most complete continued reporting of social cultural data and impacts of any catch shares program managed by NMFS. Continued annual reporting to the NMFS regional office staff and PMFC personnel will inform ongoing management actions and improve the best available science for use in management actions.

Additionally, specific topics of inquiry will be supported that have arisen as ‘areas of interest’ from the prior data collections. These include impacts on small vessel owners, the impacts of absentee owners on others in the industry, graying of the fleet, consolidation and infrastructure change, and changing women’s roles. These are a few of the areas that have been noted for tracking in the future, along with the standard changes in fishing practices, changing demographics, difficulties with observer coverage, and underutilization.

In the West Coast Groundfish Trawl Catch Share Program Five-year Review (2017), we utilized both PCGFSS data and PacFin data to determine increased impacts on small vessels in the catch share program. Costs including observer fees, were proportionally higher for smaller vessels than other vessel types participating in the fishery, making it difficult to make a profit; resulting in many individuals depending on non-groundfish fisheries for income (Russell, Van Oostenburg, and Vizek 2018, PFMC and NMFS 2017). Ownership characteristics have been shown to change in this fishery due to the quota, and our research has indicated 50% and 47.3% of owners are absentee in 2012, 2016 respectively (Russell, Van Oostenburg, and Vizek 2018, PFMC and NMFS 2017). This may be of concern and require further monitoring as many quota

programs have owner on-board requirements or provisions in place to prohibit absentee ownership (Buck 1995). Many concerns with absentee ownership include the leasing of quota resulting in its value increasing over time, making it too expensive for new entrants to purchase, as well as creating lease fees, to pay for those expensive quota negatively impacting captains and crew (Pinkerton and Edwards 2009, Ringer et al. 2018). Absentee ownership in conjunction with the requirement to diversify quota in this system requires further monitoring. Graying of the fleet is a phenomena that is occurring in fisheries across the United States (Carothers and Chambers 2012, Donkersloot and Carothers 2016, Shivlani et al. 2008, Singer and Holland 2007, Power, Norman, and Dupre 2014, Russell, Van Oostenburg, and Vizek 2018, PFMC and NMFS 2017). Concerns over lack of knowledge transfer, the difficulty in recruiting new crew, and a reduction in safety due to lower numbers of crew all deserve continued monitoring (PFMC and NMFS 2017, Donkersloot and Carothers 2016, Russell, Van Oostenburg, and Vizek 2018).

This research will also support several legal requirements (see below for description), not only for this specific management change, but possibly for other fisheries that have similar legal requirements. Results will support legal requirements by illustrating the importance of the fishery to fishing communities, by taking the first step to identifying the social characteristics of the fishery, as well as initiating an understanding of the relationships between individuals in the industry. All these results will support various sections of the MSA, which requires an understanding of social data along with other laws and regulations.

MSA

The following sections of the MSA pertain specifically to the requirements needing social and cultural data. Data collected in this effort will support current and future requirements.

- 1) National Standard 8§600.345) states:

Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities by utilizing economic and social data that meet the requirements of paragraph (2), in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities.

- 2) National Standard 4 §600.325 states:

(a) Standard 4. Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various U.S. fishermen, such allocation shall be:

(1) Fair and equitable to all such fishermen.

(2) Reasonably calculated to promote conservation.

(3) Carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.

3) Requirements for Limited Access Privileges Sec.303A. (c) (1) (C) states:

... any limited access privilege program (LAPP) to harvest fish submitted by a Council or approved by the Secretary under this section shall promote:

... (iii) social and economic benefits.

4) Sec. 303A (B) PARTICIPATION CRITERIA – *In developing participation criteria for eligible communities under this paragraph, a Council shall consider -*

(i) traditional fishing or processing practices in, and dependence on, the fishery;

(ii) the cultural and social framework relevant to the fishery;

...(iv) the existence and severity of projected economic and social impacts associated with implementation of limited access privilege programs on harvesters, captains, crew, processors, and other businesses substantially dependent upon the fishery in the region or subregion;

5) Sec. 404(a) refers to:

.....acquire knowledge and information including statistics, on fishery conservation and management and on the economic and social characteristics of the fishery.

The act clarifies this in Sec 404(c) (3) indicating

Research on fisheries, including the social, cultural, and economic relationships among fishing vessel owners, crew, United States fish processors, associated shoreside labor, seafood markets and fishing communities.

NEPA

The National Environmental Protection Act (NEPA) requires federal agencies to consider the interactions of natural and human environments, and the impacts on both systems of any changes due to governmental activities or policies. This consideration is to be done through the use of ‘...a systematic, interdisciplinary approach that will insure the integrated use of the natural and social sciences...in planning and decision-making which may have an impact on man’s environment;’ (NEPA Section 102 (2) (A)). Under NEPA, an Environmental Impact Statement (EIS) or Environmental Assessment (EA) is required to assess the impacts on the human environment of any federal activity. NEPA specifies that the term ‘human environment’ shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment’ [NEPA Section 102 (C)].

Executive Order 12898

The Executive Order 12898 of February 11, 1994, on Environmental Justice requires federal agencies to consider the impacts of any action on disadvantaged, at risk and minority

populations. To evaluate these impacts, information about the vulnerability of certain stakeholders must be better understood. Indicators of vulnerability can include but are not limited to income, race/ethnicity, household structure, education levels and age. Although some general information related to this issue is available through census and other quantitative data, these sources do not disaggregate those individuals or groups that are affected by changes in marine resource management or the quality of the resource itself. Therefore, other types of data collection tools must be utilized to gather information related to this executive order.

Regulatory Flexibility Act

The Regulatory Flexibility Act requires federal agencies to prepare an initial and final regulatory flexibility analysis which ‘...shall describe the impact of the proposed rule on small entities...’... The initial regulatory flexibility analysis ‘...shall also contain a description of any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimize any significant economic impact of the proposed rule on small entities. [RegFlex Section 603 (b) (5) (c)]. In addition, each final regulatory flexibility analysis shall contain ‘...a description of the steps the agency has taken to minimize the significant economic impact on small entities....’ [RegFlex Section 604 (a) (5)].

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.

Information sought will be of practical use as NMFS social scientists will utilize the information for descriptive and analytical purposes. In addition, for current regulatory action and in the event of future regulatory action, the information may be utilized by NMFS to meet the requirements of the regulations described above in Question 1. The results of the research will also be available for use by the NMFS Regional Offices and the Pacific Fisheries Management Council in their roles in fisheries management. In addition to direct fisheries management utility, this research and the resultant data may be utilized in future ecosystem management and community resilience efforts. These efforts include the development of various ecosystem models which incorporate various social indicators and other social information. The results of this research will increase the availability of social data to the extent that it may significantly benefit new research efforts in ecosystem modeling. Additionally, results may inform new research in the area of community resilience and the identification of communities that are highly vulnerable to change. Reports will also be available for public use to support other research concepts and future research design. The frequency of the use of the data is unknown at this time and is dependent in the regulatory actions required in the future as well as public use. With that said, as this type of data has been historically unavailable, it is expected that the availability of this type of information will have high utility.

The information collection tool is organized to ease the collection of the data and clearly identify the types of data being collected. The primary data collection tool is a survey instrument supplemented by interviews and short meetings with industry organizations as needed. The survey instrument is organized into various sections, which are pertinent to some or all of the intended respondents. The survey includes the following sections: Demographic Information,

Individual Participation, Connections, Catch-Shares Perspectives, Post Catch Shares – Quota Share Owner/Manager & Vessel Account Owner/Manager, Fishermen, and Processors (at-sea and Shoreside) and buyers/first receivers. These sections are further described as follows.

Demographic Information: This data aims to obtain a better description of the unique population of this fishery. It will provide a more accurate description of the people within that population. Information collected in this section is comparable to U.S. Census information, but on a finer scale. The U.S. Census does not collect or provide the information at a level to be able to identify a specific population of fishermen, or fishermen as a separate industry. Information about fishermen in the census is aggregated with other types of information representing the agriculture and forestry fields. As a result, it is impossible to describe the demographics of any specific fishing community through the use of U.S. Census data. The collection of this data in this section serves the role to describe this specific population of the people connected to this specific fishery.

Individual Participation: Data from this section increases our knowledge of the unique characteristics of the people in the industry beyond demographic information. Data gathered includes individual historical participation in the fishery, an understanding of family participation in the fishery, the roles individuals play in the fishery, characteristics of their jobs such as work schedules, and a better understanding of where they live versus where they work. Many of these areas may be affected by the management change. Work schedules, standard of living, etc., all may result in social impacts to individuals. The collection of this data will contribute to the identification of these impacts on a person-by-person basis.

Connections: Data in this section will provide information on the connections, and insight into the relationships, between individuals in the fishery. Questions aim to identify clear components of the fishery such as important business suppliers and organizations that may be critical to the functioning of the fishery. Information in this section informs changes in infrastructure as well and distances many may have to travel to obtain services and support. Changes in the characteristics of the fishery as a result of the management change may alter the connections and relationships in the fishery. Scientific literature speaks to these changes (McCay 1995). Data in this section will serve multiple purposes, including insight into relationships as well as the ability to measure social change in the system.

Catch Shares Perspectives: Questions in this section aim to gauge the opinions and perspectives of the individuals in the fishery about the upcoming management change. This section intended to clearly capture respondents' concerns and expectations of the system, and their level of knowledge of the system. This information will serve multiple purposes. It will clearly identify industry members' perspectives, allow for the clear measurement of the change of these perspectives over time, as well and provide a gauge of how well-informed individuals are about the management change – contributing to NMFS' and PFMC' efforts to improve communication to the public.

Post Catch Shares – Quota Share Owner/Manager & Vessel Account Owner/Manager: Questions in this section aim to understand the decisions allocation recipients made with the quota they received. Since allocations were very controversial in this particular fishery, the options to manage the allocations received are extensive. Therefore, the questions are designed

to try to understand and determine common threads in actions taken by allocation recipients and how they manage their allocations over time. In addition, as this type of management system is expected to result in consolidation of the fishermen/fishery, questions in this section aim to track how that consolidation may have occurred. Questions in this section help inform issues such as absentee ownership, diversification, and new entrants as well.

Fishermen: This section is designed specifically for those members of the fishery who are either directly or indirectly involved in, and have knowledge of, any aspect of the harvest of commercial catch. For example, vessel owners whom are not onboard, and permit owners, who are not on board as well as fishermen on board. Questions in this section aim to gather more information about fishermen and how they work in the industry. Information collected will help us understand the different fisheries individuals participate in; for example, the groundfish and the crab fisheries. Other information sought includes the common gears and gear combinations utilized, what factors contribute to their participation in a single fishery or multiple fisheries, where they fish in relation to where they live, how are they related to, and what the relationships are between individuals with whom they fish, and how they are connected to processors and why. Data in this section will greatly contribute to our ability to understand where fishing communities are located and why, the characteristics of the fishery, the relationships between fishermen and processors, and a better understanding of the working system of the fishery.

Processors (At-sea and Shoreside) and Buyers/Receivers: This section is specifically designed for those members of the fishery who receive and process the commercial harvest. Individuals targeted for this section of the survey include shoreside processors, at-sea processors, motherships, and buyers/first receivers. Questions in this section aim to gather information about a sector that is very data poor. Data gathered will help understand the distribution of processors on the west coast, how they obtain catch, their relationships with harvesters, the flow of commercial catch from the fisherman to the consumer, and how and where they market and distribute their product. Information obtained will allow for the understanding of various species that are processed, and the importance of each to the processing businesses. The measure of these characteristics both pre and post rationalization will create the opportunity to better understand the impact the catch shares program has on the processing sector.

Together these survey sections, supplemental interview data, and information from meetings with industry organizations will generate a very extensive description of the fishery. The description will include the perspectives of various aspects of the industry from fishermen to processors and other related entities. This research will not only inform the current management process, but will overarch into other management issues, as well as support legal requirements about fishing communities, social impact assessments, and areas of research. This research will also increase the utility and quality of other secondary research, completed and ongoing, by providing more accurate primary data to support secondary data collection efforts.

It is anticipated that the information collected will be disseminated to the public or used to support publicly disseminated information. As explained in the preceding paragraphs, the information gathered has utility. NOAA NWFSC Human Dimensions Program 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 subject to quality control measures and 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.

Data collection will be available in all forms possible. Accessibility of the research tools to study participants is critical to the success of the research. As a result, a wide breath of options will be available to distribute the survey and capture the data. The primary data collection tool is a survey. The secondary mode of data collection is unstructured and semi-structured interviews. Hard copy surveys will primarily be provided to research participants in-person. The survey can then be completed in the presence of the researcher to facilitate the answering of any questions, the clarification of data being collected, and support any concerns of the research participant. In addition to administering the survey in-person, the researcher can then conduct a brief unstructured or semi-structured interview to collect any other pertinent data from the survey participant.

The survey tool will also be available in hard copy to be mailed or otherwise distributed to research participants. The survey will be available in a universal electronic format to either be electronically transmitted via email or downloaded from the internet by research participants. In the event of the dissemination of the survey other than in person, directions to access the survey and all support required to return the survey to the researchers will be provided. For example, postage paid pre-addressed envelopes will be provided to those research participants who request a hard copy of the survey.

4. Describe efforts to identify duplication.

NOAA Fisheries social scientists and contractors work closely with regional academia, community based organizations, industry groups and other parties interested in this type of information. Reviews of existing information are common practice when initiating social science studies. A thorough and ongoing literature review identifies where similar studies have been initiated or are ongoing and will ensure that efforts are not duplicated. The principal investigator has briefed and discussed this research to relevant NMFS personnel in headquarters and both science centers, and regional offices on the West Coast, as well as social science colleagues in Oregon Sea Grant Programs, California Sea Grant Programs, academia, and the PFMC. The efforts of communication have served multiple functions to include making sure there will be no duplication of effort, to communicate plans for the research effort, and to establish collaborations to complete the research in the most effective manner possible.

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

This request includes the collection of data about/from individuals and those whom may be linked to or represent small businesses. Prior to contacting these respondents, researchers have

gathered any publicly available answers to the questions. Only those questions that cannot be reliably answered through this manner and may change with perspective of the respondent will be asked.

In addition, participation in data collection will be voluntary. This data collection will not require any reporting or equipment cost burdens. The burden will be limited to the time required to complete the survey. Arrangements to collect data from all research participants will be at the convenience of the participant, and as flexible as possible to minimize burden on all parties.

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

In the absence of current information on the human dimensions of marine resource use and marine ecosystems, NOAA Fisheries and Regional Fisheries Councils will be unable to adequately understand and predict the potential impacts of policy decisions on fishing communities and people, particularly those people who do not regularly attend public meetings, are located in remote communities, or spend a majority of their time at sea, but are nonetheless affected by the decisions.

The federal mandates and executive orders, described in Question 1 and related appendices of this document, require the analysis of the impacts that government actions have on the individuals and communities involved in fishing and marine resource related activities. Social impact assessments, analysis of the affected human environment, cumulative impacts as well as the distribution of impacts with a special emphasis on vulnerable or at risk communities are all examples of these requirements. The ability of NOAA social scientists to adequately respond to this charge, rests on access to timely and relevant information about the pertinent stakeholders.

A significant concern related to the quality of these analyses is the risk of being vulnerable to litigation due to the lack of fulfilling these mandates and executive orders. Therefore, not collecting this information may lead to incomplete representation of the science and information. Delays and costs due to litigation compound the issues both in the management context and the funding context. This could impact the decision making process and negatively impact the communities subject to the decisions.

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

Information collections are 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 July 26, 2019 (Vol. 84 No 144, Page 36083) solicited public comments. No comments were received.

Comments were sought from non-NOAA stakeholders; two responses were received:

From: Brad Pettinger, Director of the Oregon Trawl Commission, Brookings, OR

"In consideration of the response burden, it depends on the person responding. For some, the shorter the better. For others, not so much. Hopefully the participation will result in a benefit of such research to the fishery and management process. Participants should consider this an investment of an individuals time to secure a worthwhile change in the future of fisheries management."

From: Marit Aarvit, Owner, Windjammer Fish Northwest Inc, and Quota Share Permit Owner

"The amount of time required (to participate) is a reasonable amount of time. It is great to have input."

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

There are no plans to provide any payment or gift to respondents.

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

The information provided will be kept confidential to the extent possible per MSA Sec. 402(b) and the NOAA Administrative Order NAO 216-100, Protection of Confidential Fisheries Statistics. In addition, in the event of a Freedom of Information Act (FOIA) request, we will protect the confidentiality to the extent possible under the Exemption 4 of the FOIA.

To support the confidentiality of this research, no participant names will be included on the survey document. Participant names will be tracked in a separate document in order to 1) code participants for protection during data analysis, 2) confirm receipt of a survey from each individual, 3) avoid of duplication of responses, 4) ensure the distribution of final reports back to research participants, and 5) track the individuals in the future for the post-rationalization impacts portion of the research.

Documents containing names will be kept in locked container such as a lock box in the field or a locked file cabinet in the office setting. All electronic versions will be kept under password or access restricted systems (servers and desktop units), accessible only by study researchers.

When writing final reports and publishing the findings of this research, individual responses will be combined with responses from other participants so that no single individual may be identified. This aggregation of the data will follow the rule of 3, where any less than three responses will not be reported to protect confidentiality. All personal names provided will be

coded by the researchers with a descriptor such as ‘X Community Fisherman’ or assigned a code such as ‘A1’ as an identifier. The type of code that will be applied to each data set may vary based on the question or the analysis required of that question. Every method to protect the confidentiality of all responses will be applied in any and all contexts of this research.

In addition to the confidentiality protection measures, survey participants are provided the option to skip questions of concern and stop their participation in the survey at any time with no consequence to themselves.

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.

There are a few different areas where issues of a potentially sensitive nature will be explored. These are listed and discussed below:

1. **Relationship Information:** Survey questions inquire about the relationships between individuals in the fishery and the quality of those relationships. Scientific literature suggests that under a rationalized fishery the relationships between people change (Apostle, McCay, and Mikalsen 2002, McCay 1995). In addition, the MSA requires knowledge of these relationships. Questions have been designed to access this information in a manner to protect the responses of the participants. In addition, questions of this nature have all been provided with options *not* to answer the question, in the event a survey participant is uncomfortable. This data is important to show social changes in the fishery driven directly by the characteristics of the new management system.
2. **Connectivity/Network Information:** Survey questions inquire about the connections between industry members. Who gets information from whom, who works with whom for what purposes. Scientific literature confirms rationalization of fisheries results in consolidation and the removal of some fishermen and related industries from the fishery. The collection of data on connectivity and networks will utilize the Social Network Analysis methodology to identify those networks and visually represent them. The ability to do so will provide the opportunity to study how a system may change when people within the system are removed or change. The flow of information about management may change, the flow of product in the industry, etc. may change. The ability to map these changes pre and post-rationalization will provide the ability to show how the fishery has changed and what impacts may result from those changes. Questions of this nature will be coded as described in the confidentiality question No. 10 of this document. In addition, questions of this nature have all been provided with options not to answer the question, in the event a survey participant is uncomfortable. This data is important to show social changes in the fishery driven directly by the characteristics of the new management system.

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

These figures represented a 12% decrease from the burden hours in the second authorization and a 12% decrease from the burden hours in the original authorization. This decrease is due to more accurate knowledge of the study participants, the high loss of study participants due to health issues/death, and the loss of participants due to consolidation and exit from the fishery, as learned from the prior three data collection efforts.

Requirement	No. of Respondents	Responses per Respondent	Total No. Responses Annualized	Response time	Total Burden Hrs/Annualized	Labor Cost in \$25 to Public Per Burden Hour, Annualized
Survey/Interview Respondents 4 th Effort of Data Collection	350	1	116	1 hour	116	\$2,900.00
Interviews Only -4 th Effort	50	1	16.7	30 min	8	\$208.75
Meetings - 4 th Effort	10	1	3.3	1 hour	3	\$32.50
Total Requested Per OMB 83-i	410		136		127	\$3,141.25

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).

No cost other than labor cost is expected.

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

Total estimated annual cost to the federal government is \$195,750 for year 1 (of the extension time period – 2019). The survey will be conducted by NMFS federal staff, grantees, and students. In addition to these costs, travel costs will be incurred to various field sites, as well as printing and mailing of surveys. Survey design, data collection and processing, and report development will be conducted by NMFS federal staff, grantees(s), and students. These estimated costs for the grantees(s) and students have been included below. Based on past experience, costs increase each year for grantee costs (including increases in overhead costs), travel costs, as well supply costs. Please see table below for itemized costs.

Description	FY2019 Budget
Contractor/student salary/wages	\$180,000.00
Travel	
Washington, Oregon, and California	\$ 15,000.00
Printing	\$ 700.00
Postage	\$ 50.00
Supplies	\$ 8000.00
Total	\$195,750.00

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

This renewal has a reduction of 16 burden from the previous renewal. This decrease is due to more accurate knowledge of the study participants, the high loss of study participants due to health issues/death, and the loss of participants due to consolidation and exit from the fishery, as learned from the prior three data collection efforts.

Minor changes were made to the survey to both update the time-series cycle and respond to requests to PFMC staff. Specifically, throughout the survey, where there was text that read “since the implementation of the catch share program”, this text was replaced with “in the last five years”. This decision was made as we have completed the first five years of the program and the first five-year review of the program, and with the movement to a five-year rotation on the data collection this is an acceptable and reasonable time frame for data collection. The ‘transition’ term no longer applies.

Second, the survey contained multiple questions in section D: ‘Catch Shares Perspectives’ that asked the participant to reflect upon their perspective since the ‘transition to the catch shares

program'. As the program is well past the 'transition', we have removed two questions, and replaced it with one question D9, requested by PFMC staff asking participants to rate their level of satisfaction with the catch shares program by year on a 5-point likert scale.

Verb tenses and well as minor vocabulary adjustments will be reviewed to make sure the questions are accurate.

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

Several publications are expected for this research. The most complete publications will be several NMFS technical memoranda, which will have the most complete results. Each memorandum will be extensive, to include an update of the previous results and a comparison between previous data collection efforts and the current data collection effort to measure and show any changes that have occurred in the system due specific characteristics of the management structure. These technical memoranda will be available in hard copy and CD formats, and will be posted on the Human Dimensions website, under Publications. In addition, several journal publications are expected. The exact number of publications and the journals where the results will be published are yet to be determined. The goal is to make sure the information is widely available for all those interested in the research.

Below are the currently list of publications in various states:

- Russell. S.M., A. Vizek, M. Van Oostenburg. In prep. The Pacific Coast Groundfish Fishery Social Study: Part 1- A Multi-Year Analysis by Study Participant Role. Program.U.S. Dept. Commer., NOAA Tech Memo. NMFS-NWFSC-10X.
- Russell, S.M., M. Van Oostenburg, A. Vizek. 2018. Adapting to Catch Shares: Perspectives of West Coast Groundfish Trawl Participants. Coastal Management. 46:6, 603-620, doi:https://10.1080/08920753.2018.15222491.
- PFMC and NMFS. 2017. West Coast Groundfish Trawl Catch Share Program: Five-year review. Approved by the Pacific Fishery Management Council November 16th 2017, Costa Mesa, CA.
- Russell. S.M., A. Arias-Arthur, K. Sparks, A. Varney. 2016. West Coast Communities and Catch Shares: The Early Years of Social Change. 2016. Coastal Management. 44(5), 1-11.
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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.

This information collection will display the expiration date on all survey instruments.

18. Explain each exception to the certification statement.

There are no exceptions for compliance with provisions in the certification statement.