

**SUPPORTING STATEMENT
SOCIAL IMPACTS OF THE IMPLEMENTATION OF CATCH SHARES PROGRAMS
IN THE MID-ATLANTIC
OMB CONTROL NO. 0648-XXXX**

INTRODUCTION

This request is for a new information collection.

Catch share systems are being encouraged and considered in a variety of United States (U.S.) fisheries. Scientists, policy makers, and stakeholders (including fishermen and non-governmental environmental organizations) have different views about potential social and economic impacts and outcomes of these output-oriented systems. Thus establishing baselines for trend analysis and identifying and evaluating impacts over time is essential to assess and improve such systems and determine whether intended outcomes are realized. Without baselines we cannot as effectively judge change due to catch shares from change due to other factors. The largest-ever catch share program (in terms of number of permits) was implemented in the groundfish fishery in the Northeast region May 1, 2010. An Individual Transferable Quota for general category scallop permits was established April 1, 2010. Other catch share programs are being contemplated in the Northeast Region (New England and the Mid-Atlantic) for the near future. Baselines are rapidly being left behind. A University of Rhode Island survey of fishermen and former fishermen in New England in 2009/2010 partially captured this baseline for fisheries in general, as well as some immediate post-implementation impacts for groundfishermen and general category scallopers in that region. This survey will replicate that survey in the Mid-Atlantic. Timing is critical in order to capture baselines for fisheries in general, and immediate post-implementation effects for recently implemented catch shares.

A. JUSTIFICATION

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

Historically, changes in fisheries management regulations have been shown to impact individuals within the fishery. In promulgating and issuing regulations, the National Marine Fisheries Service (NMFS) must determine the relative impacts of different management measures (re. Colburn et al. 2006). Catch shares are currently being highly encouraged as a core strategy to improve the status of fish stocks and habitat, and also the social and economic status of communities and individual fishermen (NOAA 2010). Several new catch share programs have just been implemented or are about to be implemented in the NMFS Northeast Region.

An understanding of social and economic impacts in fisheries – achieved through the collection of data on fishing communities, and on individuals who fish – is a requirement under multiple federal laws, including the [National Environmental Policy Act of 1969 \(NEPA\) as amended](#) (42 U.S.C. 4371 et seq.), the [Magnuson-Stevens Fishery Conservation and Management Act of 1976 as amended through 2006](#) (MSA), [Executive Order 12898 of February 11, 1994 on Environmental Justice](#) (E.O. 12898) and the [Regulatory Flexibility Act of 1980 as amended by the Small Business Regulatory Enforcement Fairness Act of 1996](#), and subsequently (RFA). The collection of these data, therefore, not only complies with legal requirements for existing management actions, but will inform future management actions requiring equivalent information.

NEPA

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” (Council on Environmental Quality NEPA Implementing Regulations 40 CFR 1508.14).

E.O. 12898

E.O. 12898 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.

RFA

The RFA 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. [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...’ [Section 604 (a)(5)]. Fishing vessels in the Northeast are predominantly categorized as small entities. Individual crewmembers are also considered to be small businesses in their status as sole proprietors.

MSA

Under the MSA there are a variety of requirements related to social, cultural and economic issues for fishermen and their communities. National Standard 8 (section 301(8)), for instance, requires that: "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 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. Section 303(b)(6) on limited entry requires examination of "(A) present participation in the fishery, (B) historical fishing practices in, and dependence on, the fishery, (C) the economics of the fishery, (D) the capability of fishing vessels used in the fishery to engage in other fisheries, (E) the cultural and social framework relevant to the fishery and any affected fishing communities, and (F) any other relevant considerations." Section 303(a)(9) on preparation of Fishery Impact Statements notes they "shall assess, specify, and describe the likely effects, if any, of the conservation and management measures on--(A) participants in the fisheries and fishing communities affected by the plan or amendment; and (B) participants in the fisheries conducted in adjacent areas under

the authority of another Council, after consultation with such Council and representatives of those participants."

CONTEXT FOR PROPOSED RESEARCH

The use of catch share programs will have an impact on those individuals participating in the affected fisheries. Possible impacts include loss of employment opportunities and shoreside infrastructure, and disruption to social networks. Amendment 16 to the Northeast Multispecies (groundfish) Fishery Management Plan, implemented on May 1, 2010, is the largest catch share program in number of permit holders that has ever been implemented in the U.S., and includes 17 group quota or 'sector' allocations. Additional Northeast catch share plans instituted in 2009 or 2010 are the Mid-Atlantic golden tilefish ITQ (2009) and the Atlantic sea scallop IFQ for general category permits (April 2010). Catch shares are under consideration for the upcoming amendment in the monkfish fishery, and in discussion for other fisheries as well. NMFS is required to assess the impact of these plans, as well as their impacts relative to other management measures in place in the Northeast.

The rapid implementation of the groundfish catch share program made capturing a full pre-implementation baseline virtually impossible. A University of Rhode Island survey of fishermen and former fishermen in New England in 2009/2010 partially captured this baseline for fisheries in general, as well as some immediate post-implementation impacts for groundfish and general category scallop fishermen in that region. This research aims to study the immediate post-implementation effects on fishermen in the groundfish and general category scallop fisheries in the Mid-Atlantic, as well as provide a baseline for other fisheries prior to any implementation of additional catch share programs. The data collected will provide a baseline description of the affected industry to compare with future assessments of fishermen, and cover 1) demographic information, 2) participation in management, 3) impacts of management, 4) perspectives on catch shares, and 5) environmental ethics, job satisfaction and well-being. This information will lead to a greater understanding of the social impacts this management measure may have on the individuals in the fishery. To achieve these goals it is critical to collect the necessary data as quickly as possible, both to capture baselines of fisheries for which catch shares are being contemplated and to facilitate recall of baseline conditions in the groundfish and scallop fisheries to capture Year One impacts (i.e., by April 1, 2011).

This study is a post-implementation data collection effort to achieve the above-stated objectives for the Northeast groundfish fishery and other catch shares just implemented, as well as a pre-implementation study for upcoming catch share plan implementations. This is a time-critical study, as once these baselines are lost it will be impossible to reconstitute them.

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, in the event of future regulatory action, the information may be utilized by NMFS to meet the requirements of the regulations described above under Question 1. Further, this research and the resultant data may be utilized in efforts that include the development of ecosystem models which incorporate 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. Reports will

also be made available to the New England and Mid-Atlantic Fishery Management Councils and the public. The exact 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. However, since this will be information not previously available, it is expected to have high utility.

The survey form is organized to ease the collection of the data by clearly identifying the types of data being collected, through the use of clearly defined sections. The survey will collect information on 1) demographic information, 2) participation in management, 3) impacts of management, 4) perspectives on catch shares, and 5) environmental ethics, job satisfaction and well-being. These are data that are unavailable from other sources. The ordering of questions is based on a similar study conducted in New England in 2009 and 2010 and alternates more complicated questions with less complicated questions to reduce the likelihood of interviewee fatigue. The sections are further described below.

The *Demographic Information* section elicits information on the respondent and his/her age, town of residence, level of education, primary fishery, relative income level compared to two years ago, relative ability to secure crew compared to two years ago, and family involvement in the fishing industry. Comparisons between the present and past are intended to capture general trends in the fishing industry. This standard demographic information will allow us to better understand the unique characteristics of the Mid-Atlantic fishing industry. Information collected in this section is comparable to United States (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 U.S. Census is aggregated with other industries such as forestry and agriculture, making it impossible to describe the demographics of any specific fishing community (re. Clay and Olson 2008 on the concept of fishing community within U.S. fishery law) through the use of these data. Collection of the data in this section serves to describe this specific population of fishermen.

This information is related to specifics of how the fishing industry operates and can then be utilized to better understand impacts on individuals if regulatory actions change how, when or where fishing may occur.

The *Participation in Management* section seeks to describe the types of actual involvement in the fishery management process and individuals' perceptions of their level of influence in that process. Information in this section will allow us to better understand the characteristics of those who participate in management processes, as well as the types of participation that are most common. This, in turn, can help in better distributing information about management proposals, and generating greater involvement. Management actions created with greater participation of stakeholders are better received and more likely to be effective. These questions address "Governance/Participation" and "Legitimacy/Transparency" under Governance in the Northeast Social and Economic Performance Measures (Northeast Performance Measures) recently created by the Social Sciences Branch of the Northeast Fisheries Science Center. The full list of Performance measures is: Financial Viability, Distributional Outcomes (Equity), Governance, Stewardship and Well-Being (Clay et al. 2010); detailed indicators are listed under each performance measure. Resilience was also identified as critical at both the regional and national levels within NMFS, but was left for the next round of revisions as indicators for this are still under development. Some questions on this survey will, however, test possible indicators for resilience.

The *Impacts of Management* section elicits information on relative impact of different types of management measures on individuals and their fishing enterprises, as well as individuals' ability to understand the regulations and will capture perceived impacts related to the implementation of catch shares. In order to capture responses that reflect the regulations they are most affected by a predetermined list of potential impacts is not provided. Information in this section will help generate a profile of the industry that describes impacts on fishing activity, families, and income. These questions address Stewardship under the Northeast Performance Measures (see above and Clay et al. 2010 for background): as well as Resilience, and facilitate minimization of impacts to fishing industries and fishing communities, as required under law (see Question 1 above). These also relate to the Northeast Performance Measures of Financial Viability and Distributional Outcomes.

The *Perspectives on Catch Shares* section elicits information on perceived advantages and disadvantages of catch share systems. Questions target information that would help to understand potential positive and negative impacts to the fishing industry. Using open-ended questions, we expect responses to identify advantages and disadvantages of greatest concern to interviewees and therefore do not provide a predetermined list of possible responses. This information will help us describe respondents' concerns and expectations, and track changes in these subjective measures over time. We can further track objective changes over time and thus better understand how the industry and communities may be impacted if additional change is mandated through regulation. (See Smith and Clay 2010 on the importance of including both subjective and objective measures.) This section relates to Governance under the Northeast Performance Measures (see above and Clay et al. 2010 for background).

The *Environmental Ethics, Job Satisfaction And Well-Being* section elicits information on individuals' sense of responsibility for the state of the marine resource, their satisfaction with a variety of features of fishing that have been shown to be important to commercial fishermen worldwide, and the individuals' perceptions of their physical and mental health status (Smith and Clay 2010; Pollnac et al. 2006[2008]; Pollnac et al. 2008; Pollnac et al. 1988). The job satisfaction and well-being questions address the Northeast Performance Measure Well-Being (see above and Clay et al. 2010 for background), and will inform our understanding of the impacts of changes in management regulations on the well-being of fishermen. The environmental ethics questions address the Northeast Performance Measure Stewardship and will inform our understanding of the environmental behavior of fishermen, perhaps helping to explain why in specific instances they are more or less open to increased regulation (re. Davis et al. 2008).

The goal of the survey with its distinct sections is to provide information on the various aspects of the industry that will support and enable the measurement of a variety of indicators under the Northeast Performance Measures (see above and Clay et al. 2010 for background). Aggregate data from the survey instrument can be used to describe the industry and estimate impacts of any future regulations on the industry. This research will not only inform the current management process, but will be relevant to other management issues, as well as support legal requirements regarding fishing communities and social impact assessments, and provide data on and questions for important research topics. 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 and/or used to support publicly disseminated information. As explained in the preceding paragraphs, the

information gathered has high utility. NOAA's National Marine Fisheries Service 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 in accordance with NOAA 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.

Due to the hard-to-find nature of the population to be studied, the survey will be administered in-person. Fishing vessel owners/permit holders are known because they must supply contact information for their permits. Vessel crew, however, are not licensed or regulated in any way that provides a sample frame from which to seek respondents. Further, crew may not have a permanent address or phone number or may live aboard the vessel on which they work (Kitner 2006) and thus can be considered hard-to-find individuals, requiring the use of in-person surveys administered to individuals by survey personnel. Since in-person surveys are completed in the presence of the interviewer, that interviewer can facilitate the answering of any questions and the clarification of data being collected, and respond to any concerns of the research participant. In addition to administering the survey in-person, the researcher can then discuss any concerns that the interviewee may have. In order to maintain comparability across respondents all surveys, both crew and owner must be in-person. Therefore we are not providing an internet option.

No technology will be used or provided to complete the survey forms.

4. Describe efforts to identify duplication.

NOAA Fisheries social scientists and contractors work closely with regional academics, community-based organizations, industry groups and other parties interested in this type of information. We have been in specific contact with regard to this survey and/or are aware of the current research activities of key government and academic research institutions that gather fisheries information in the Northeast, including the New England Fishery Management Council, the Mid-Atlantic Fishery Management Council, the Atlantic States Marine Fisheries Commission, the University of Rhode Island, the MIT Sea Grant Program, the University of New Hampshire, the University of Maine, the Gulf of Maine Research Institute, the University of Massachusetts, the Rutgers University, and the Virginia Institute of Marine Science.

Further, we have conducted a thorough literature review of related studies in the Northeast and elsewhere to assure there is no duplication with current activities. An earlier version of this survey was conducted by the University of Rhode Island in New England in 2009-2010. A subset of the questions in that and the planned Mid-Atlantic survey was included in a survey of New England groundfish permit holders conducted by the Gulf of Maine Research Institute in 2009. A subset of the questions in this survey will be included in a future ongoing, periodic survey planned to first be implemented in 2012. The information collection submission for that survey is in preparation but not yet submitted. These repetitions and overlaps have occurred in different time frames or were aimed at different populations, so were not duplicative. No one responded to more than one of these surveys within a given year, and these data are specific to the years in

which they are collected. Therefore, the existence of data for any given question from a prior year does not invalidate the need for data collection during the timeframe of this survey.

The data requested in this survey are informed by the recently developed Northeast Performance Measures (see above and Clay et al. 2010 for background) and recent Northeast and national NMFS social science workshops (scroll down at <http://www.nefsc.noaa.gov/read/socialsci/catchshares/> to see presentations from these two workshops). Prior and/or ongoing research projects in the Northeast on community profiles, community supported fisheries and sectors will inform and/or complement this data collection but not duplicate it.

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 on individuals and those whom may be linked to or represent small businesses. Prior to contacting these respondents, researchers will gather 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.

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

Not collecting this information will mean the loss of a vital baseline for information needed to evaluate the impacts of introducing catch share programs in the Northeast. In the absence of current information, NOAA Fisheries and Regional Councils will be unable to adequately understand and predict the potential impacts of policy decisions on people, particularly those people who do not regularly attend public meetings, but are nonetheless affected by the decisions. Loss of a baseline, further, will make it impossible to fully evaluate the impacts as required under NEPA and the MSA (see response to Question 1).

A significant concern related to the quality of these analyses is the risk of being vulnerable to litigation for not fulfilling the mandates and executive orders described under Question 1. Therefore not collecting this information may lead to incomplete representation of the science and information. This could impact the decision making process and negatively impact the individuals and communities subject to the decisions.

This particular collection will be conducted only once, though a subset of its questions will be incorporated into a planned ongoing survey (estimated to begin in 2012) which has not yet been submitted for OMB approval. Details for the ongoing survey will be addressed in the submission for that survey.

There is a time constraint to commence the survey due to the initial year of the groundfish a catch share program having begun May 1, 2010 and the scallop general category catch share program having begun April 1, 2010. To not only capture initial year impacts but understand the baseline, this survey must be implemented as quickly as possible after April 1, 2011 in order to maximize respondent recall.

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

The information collection is consistent with OMB Guidelines for Information Collections.

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 September 10, 2010 (75 FR 55306) solicited public comment.

Two (2) requests for information were received in response to the Federal Register Notice. One person from the Mid-Atlantic Fishery Management Council asked for a copy of the Federal Register notice. This person, who had not yet read the Notice, was requested by his superior to inquire about the content of the survey with regards to any potential duplication of effort with a possible future survey that the Council was considering implementing. He did not request a copy of the survey and there were no further comments or requests for information from this person. Another person from the Northwestern University requested “the questionnaire or schedule, as well as a copy of the research proposal itself, talking about the purpose, value, etc. of this information collection, as noted below in today's Federal Register. Please also include a copy of the "NOAA Draft Catch Share Policy" noted below, as well as a copy of the University of Rhode Island study, also referenced below. Finally, please include a paper copy of Amendment 16 to the Multispecies (groundfish) Fishery Management Plan.” These documents were supplied with the exception of the URI study as the final report is not yet due for that study. No specific comments were made or further information requested.

As described in Part B Question 1, this study is modeled after a prior study conducted in New England by the University of Rhode Island in 2009/2010. Prior to the implementation of that study a literature review was conducted to find other surveys with questions on the topics of interest, so as to have as many questions as possible that had already been tested by other researchers. In addition that survey was pretested, both with regard to the questions and to their sequencing. During the pretest of that study, consultations were made with fishermen regarding the availability of similar data and clarity of instructions. Further, that study was funded in part by a fishing industry-supported research foundation, Commercial Fisheries Research Foundation, <http://www.cfrfoundation.org/>, due to the lack of the data which we are now proposing to collect.

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 respondents.

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

No personally identifiable information will be collected. The survey is anonymous. No data can be connected to an individual; there is no identifying information retained whatsoever. Thus even protections under Section 402(b) of the Magnuson-Stevens Act as amended in 2006 (16 U.S.C. 1801, et seq.) do not apply.

Because no proprietary data are collected (i.e., landings or value, fishing grounds), there are no issues of confidentiality with regard to business information.

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 will be asked.

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

The total number of burden hours is projected to be approximately 112.5 (113) hours. The study involves in-person surveys. As described in Part B, Question 1, the estimated number of respondents is 270 based on a targeted number of 300 respondents and a 90% response rate. The time to complete the survey per respondent is estimated at 25 minutes, for a total survey burden of 113 hours. It is expected that 10 oral histories will be conducted with individuals not included in the target population to provide an in-depth understanding of the social context of the effects of the implementation of the catch shares program. To choose subjects for these oral histories, individuals knowledgeable about the fishing industry will be selected within ports chosen based on the multivariate criteria discussed in Section B. 2 below. The oral histories are not included in the below estimates as oral histories are not subject to PRA requirements.

This collection will occur only once.

Description	Targeted No. of Respondents	No. of Responses based on a 90% response rate	Time to complete the survey	Estimated Burden Hours (25x270)	Labor Cost in \$25 in Public per Burden Hour, Annualized
Total burden	300	270	25 minutes	113	\$2,8125

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 additional cost to the public 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 \$64,369. The survey will be conducted by the contractor and students with assistance from NMFS federal staff. In addition to contractor costs, travel costs will be incurred to various field sites, and there will be costs for printing of surveys, and for supplies. Survey design, data collection and processing, and report development will be conducted by both the contractor and NMFS federal employees. Costs for the contractor have been included in the list below. Please see table below for itemized costs.

Description	Cost FY2010 Budget
Contractor /student wages	\$ 46,819
Contractor/student travel (Lodging, per diem, and mileage)	15,000
NMFS* Travel (Lodging, per diem, and mileage)	1,250
Printing	100
Supplies	1,200
Total	\$ 64,369

*National Marine Fisheries Service (NMFS)

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.

Survey numerical and textual information will be a product of this study. Textual information will be numerically coded and used for categorical analysis. Survey data will be analyzed using standard social science quantitative data analysis methods. Where possible and relevant, final reports and other relevant portions of the research process will be posted on <http://www.nefsc.noaa.gov>. Where relevant, studies in their entirety will be published as internal reports and in part will be submitted for publication in peer-reviewed journals to encourage additional analysis and review of data collected through this process, as well as to disseminate findings.

Timeline	MONTH											
	1	2	3	4	5	6	7	8	9	10	11	12
<u>ACTIVITY</u>												
Prepare instruments	x											
Review 2ndry data	x	x										
Select sample	x											
Survey		x	x	x	x	x	x	x	x			
Data analyses								x	x	x	x	
Report preparation										x	x	
Final report												x

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.

NA.

18. Explain each exception to the certification statement.

NA.