

SUPPORTING STATEMENT
SOCIAL AND ECONOMIC IMPACTS OF HURRICANE SANDY ON THE
COMMERCIAL AND RECREATIONAL FISHING INDUSTRIES OF NEW YORK AND
NEW JERSEY
OMB CONTROL NO. 0648-XXXX

A. JUSTIFICATION

This request is for a new information collection. There is a time constraint to commencing the survey due to the fact that it has been over 11 months since Hurricane Sandy struck the Northeastern coast. **To not only capture initial year impacts but understand the pre-storm baseline, this survey must be implemented as quickly as possible and prior to December 30, 2013 in order to maximize respondent recall. In addition, a portion of the businesses that constitute the target population of this study operate on a seasonal basis and generally cease activities by the end of December 30, 2013.**

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

Hurricane Sandy, considered the second most costly storm in the history of the United States (U.S.), struck New Jersey and New York on October 29, 2012, significantly impacting the fishing industries in these states. Hurricane Sandy generated so much damage and disruption to coastal fishing communities that it was formally considered a ‘*fishery resource disaster.*’ Restoring both the commercial and recreational fishing sectors is critical to rebuilding the economic base of these states. The Northeast Fisheries Science Center’s Social Sciences Branch (SSB) of the National Oceanic and Atmospheric Administration’s (NOAA) National Marine Fisheries Service (NMFS), located in Woods Hole, MA, intends to perform a survey among participants in the commercial and recreational fishing industry in New York and New Jersey affected by Hurricane Sandy. The survey will collect data on commercial and for hire fishermen, bait and tackle stores, seafood dealers, marinas and aquaculture facilities.

The purpose of this study is to understand how Hurricane Sandy affected the commercial and recreational fishing industries. The survey is intended to identify long term impacts and impediments to recovery. This data collection provides essential information on the current condition of the fishing industries in these states that can be used both to improve future responses to disasters and in fishery management actions in the Northeastern United States. This information will increase the agency’s knowledge of the compounding effects of natural disasters and changes in fisheries regulations in order to improve fisheries management. SSB will use the data collected in this survey to create a one year post-impact baseline.

Context for fishery management plans

An understanding of social and economic impacts – achieved in fisheries 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) and [Executive Order 12898 of February 11, 1994 on](#)

[Environmental Justice](#) (E.O. 12898). 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 (CEQ) NEPA Implementing Regulations 40 CFR 1508.14). In addition, under 40 CFR 1508.7, CEQ Implementing Regulations make clear that regulators must consider cumulative impacts. These are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”

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.”

EXECUTIVE ORDER (E.O.) 12898

Executive Order (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.

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.

This will be a one-time information collection using a structured interview administered via mail, telephone, or in-person by National Marine Fisheries Service (NMFS) staff or contractors.

Purpose

Information sought will be of practical use, as NMFS social scientists will utilize the information for descriptive and analytical purposes, improving our understanding of the impacts of disasters and how, how well, and how quickly coastal residents recover. In addition, in the event of future fishery disasters or 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 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 on 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.

Types of information collected and rationale

This research was designed to obtain information from different sectors involved in the commercial and recreational fishery in the states of New York and New Jersey, which could potentially have been affected by Hurricane Sandy. These sectors were grouped into four categories: fishermen (commercial and for-hire), aquaculture facility owner/manager, seafood dealer, and bait & tackle and marina owner/manager (see Table 4 in Section B, Question 1 for more detail).

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) general demographics, 2) business impacts, 3) community recovery, 4) individual well-being, and 5) views on climate change. These are data that are unavailable from

other sources. The ordering of questions alternates more complicated questions with less complicated questions to reduce the likelihood of interviewee fatigue.

The survey is presented in three different versions (attached to this document) to better address the specific focus populations: commercial fishermen, recreational (for-hire) fishermen, and all other businesses. The questions are comparable and most changes are attributed to wording, adopted to address each population appropriately. Segments of the surveys that differ between the different versions are in red font in the attached document to facilitate comparison.

Demographics

Basic demographic information including name and address will already be furnished from the master list of potential participants. Information on position held, business name, and age will be requested. Surveys directed at commercial and recreational (for-hire) fishermen include questions specific to respondent's current fishery activity such as number of vessels owned, length of principal vessel, and target species. This demographic information will allow us to better understand the unique characteristics of the fishing industry participants in New York and New Jersey. The U.S. Census does not collect or provide information at a level to be able to identify a specific sector of the fishing industry.

Business Impacts

This section is related to specifics of how businesses were affected by Hurricane Sandy. Information sought in this section includes impacts to businesses in terms of physical damages, lost revenue and income, attribution of recovery, impediments to recovery and level of recovery.

Community Recovery

This section is related to specifics of how communities may have been affected by Hurricane Sandy. Questions in this section focus on changes to community since the storm, attribution for these changes and perceptions of potential changes in the future.

Personal Well-being

This section is adapted from Marshal and Marshal (2007) and is related to how people feel about their current business situation. Using a Likert scale, questions are intended to capture the ability of the participant to be prepared for and cope with change in general and in relation to natural disasters.

Views on climate change

This section is intended to capture respondents' perception of the potential causal effects that climate change had on Hurricane Sandy and the reasons for their response.

Data use and public dissemination

This research will be used by NMFS, Congressional staff and the public to understand the effects of Hurricane Sandy and potential future such disasters on the fishing industry. Aggregate data from the survey instrument can be used to describe the industry and estimate impacts of any future natural disaster or regulations on the industry. Further, it will inform the current management process and provide information relevant to other management issues. It will support legal requirements regarding fishing communities and social impact assessments. This study will also provide data on and questions for important research topics such as climate change, ecosystems, and community resilience and vulnerability. Lastly, it will 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 to be 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.

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. There are no studies of the long terms impacts from Hurricane Sandy underway or planned. However, the PIs for this study are engaged as co-PIs in a National Science Foundation (NSF) Rapid Response Grant "Weathered Storms and Following Seas: Fisheries in the Wake of Hurricane Sandy" with Dr. Bonnie McCay at Rutgers University. The NSF study is focused on the collection of narratives about the storm from a small number of fishing industry participants in select ports. The only overlapping questions are related to demographic information such as name and age.

Staff at the Northeast Fisheries Science Center are preparing an assessment of the impacts of Hurricane Sandy on fish processors in New York and New Jersey. There is no concern

regarding overlap or duplication of effort because that data collection is focused specifically on processing firms, a business sector not included in this study.

Prior and/or ongoing research projects in the Northeast on community profiles, and fishermen job satisfaction 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 who 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 the 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 Hurricane Sandy in New York and New Jersey. In the absence of timely information, NOAA Fisheries will be unable to accurately portray the current conditions of fishing communities in New York and New Jersey. It will not be possible to separate out the effects of the storm from the effects of management regulations, thus reducing the usefulness of subsequent social impact assessments. Further, loss of a current baseline – while initial recovery is still in progress and details are still recalled - will make it impossible to fully evaluate the social, economic, and cumulative 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**. Not collecting this information may lead to incomplete representation of the necessary social and economic data for good science. This could hamper the decision making process and negatively impact the individuals and communities subject to the decisions.

This specific collection will be conducted only once.

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 August 26, 2013 (78 FR 52761) solicited public comments. There were no comments on the information collection itself.

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.

Name, address and telephone number will be assembled from state agencies, fishing industry contact and membership lists. This information will be used to select the sample population. Assurance of confidentiality is provided on the form. We have included text in the question guide that assures confidentiality as required by section 402(b) of the Magnuson-Stevens Act and NOAA Administrative Order 216-100, Confidentiality of Fisheries Statistics, and that states the information will not be released for public use except in aggregate statistical form, without identification as to its source.

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

Data are requested on lost income due to Hurricane Sandy, but responses to individual questions are voluntary, and all data will be aggregated in a manner consistent with NOAA standards for confidentiality, privacy, and electronic information, so there are no privacy concerns. These data are important, however, for judging actual monetary damages due to the storm.

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.

None of the questions being asked in the survey deal with matters that are considered private.

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

Table 1 provides estimates for the annual number of respondents, responses, and burden hours and costs associated with burden hours. This collection will occur only once and it will involve an estimated 921 respondents with each respondent providing one response, resulting in a total of 921 responses. The time to complete the survey is estimated at 25 minutes, for a total survey

burden of approximately 384 hours and estimated \$27,897 in total labor cost.

Table 1. Estimates for the total number of respondents, responses, average time per response, burden hours, and total cost for responding

	Total annual number of respondents	Responses per respondent	Total number of annual responses	Average response time per response	Total time for responding (Burden Hours)	Average loaded hourly labor cost	Total labor cost for responding
Fishermen (commercial and for-hire)	356	1	356	25 min	148	\$44.98*	\$6,657
Aquaculture facilities (owner/manager)	19	1	19	25 min	8	\$90.00**	\$720
Seafood dealers (owner/manager)	232	1	232	25 min	97	\$90.00**	\$8,730
Bait and Tackle Stores and marinas (owner/manager)	314	1	314	25 min	131	\$90.00**	\$11,790
TOTAL	921	-	921	-	384	-	\$27,897

* Labor costs calculated based on estimates from the Bureau of Labor Statistics (BLS) for 45-3011 Fishers and Related Fishing Workers <http://www.bls.gov/oes/current/oes453011.htm>. The value for fishermen (boat owners) is the 90th percentile (\$28.11) and marked up by 60% to reflect a loaded rate.

** Labor costs calculated based on estimates from the BLS for 11-0000 Management Occupations (Major Group) <http://www.bls.gov/oes/current/oes110000.htm>. The value for all owner/managers is the 90th percentile (\$90.00), which is believed to reflect a loaded rate for the sectors studied.

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 one-time cost to the federal government is \$145,000. The survey will be conducted by the contractors 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. In addition, one FTE (ZP-4) is expected to spend 10% of her time overseeing this project (\$10,000).

Table 2. Estimates of costs to the Federal Government

Item	Cost
Contractor wages	\$120,000
Contractor travel (lodging and per diem)	\$18,362
NMFS Travel (lodging and per diem)	\$4,500
Printing	\$500
Postage and Supplies	\$1,368
TOTAL	\$145,000

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

This is a new collection.

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

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> and <http://www.st.nmfs.noaa.gov/index>. 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.

Table 3. Data collection, sampling, analyses, and reporting timeline

	MONTHS											
ACTIVITY	1	2	3	4	5	6	7	8	9	10	11	12
Prepare Instruments												
Review Secondary Data												
Select Sample												
Survey												
Data Analyses												
Report Preparation												
Final Report												

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.

Not Applicable.