# SUPPORTING STATEMENT <br> SURVEY OF FISH PROCESSORS AND DISRUPTIONS CAUSED BY HURRICANE SANDY <br> OMB CONTROL NO. 0648-XXXX 

## A. JUSTIFICATION

This request is for a new information collection.

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

There are two purposes to this survey. The first purpose is to understand how Hurricane Sandy directly impacted fish processors in the Northeast United States. The second purpose is to increase the agency's knowledge of the supply and distribution networks of fish and fishery products in order to improve fisheries management.

## Hurricane Sandy direct impacts

Under the Magnuson-Stevens Fishery Conservation and Management (MSA), the Department of Commerce is authorized to provide disaster assistance to the fishing industry, including fish after commercial fisheries failures (Section 312) and catastrophic regional fishery disasters (Section 315). In order to effectively develop and respond to future disasters, it is important to understand the status of existing fish processors and their dependence on the regional fishery for raw materials. Understanding how Hurricane Sandy impacted fish processors in these will provide insight into the true social and economic costs of this disaster. Just as importantly, it will increase the National Oceanic and Atmospheric Administration’s (NOAA) National Marine Fisheries Service's (NMFS) knowledge and capacity to respond to future disasters in the Northeast United States.

- Section 315 of the MSA describes regional coastal disaster assistance programs for catastrophic regional fishery disasters, which were declared in New York and New Jersey after Hurricane Sandy. This section authorizes "a regional economic transition program to provide immediate disaster relief assistance to the fishermen, charter fishing operators, United States fish processors, and owners of related fishery infrastructure affected by the disaster."
- Section 312 of the MSA describes commercial fishery failure assistance programs; funds are available for "any activity that the Secretary determines is appropriate to restore the fishery or prevent similar failure in the future and assist a fishing community affected by such failure."

Agency's knowledge of the supply and distribution networks of fish

Both the National Environmental Policy Act (NEPA) and the reauthorization of the MSA require considerations of social and economic impacts of fishery management decisions. The MSA also requires a strategic plan for fisheries research, including research on "the social, cultural and economic relationships among fishing vessel owners, crew, United States (U.S.) fish processors, associated shoreside labor, seafood markets and fishing communities." Furthermore, the President's Executive Order 12866 (E.O.) requires considerations of costs and benefits to the nation as well as a determination of a significant regulatory action.

- 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 and the relationship of people with that environment" (Council on Environmental Quality NEPA Implementing Regulations 40 CFR 1508.14).
- Under the MSA there are a variety of requirements for fisheries management related to social, cultural and economic issues for fishermen and their communities (Section 301). For example, National Standard 1 for fishery conservation and management states that "Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry." National Standard 5 states that "Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources." National Standard 8 requires management measures to "take into account the importance of fishery resources to fishing communities by utilizing economic and social data."
- In addition to requirements for fisheries management, Section 404 of the MSA requires NMFS to maintain a program of fisheries research that is "designed to acquire knowledge and information, including statistics, on fisheries conservation and management and on the economics and social characteristics of fisheries."
- Under Executive Order 12866, "agencies should consider all costs and benefits of available regulatory alternatives, including the alternative of not regulating....Further, in choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits... unless a statute requires another regulatory approach."

Fish processors are part of the fishing industry, and the effects of alternative fisheries policies on
these businesses should be considered. Fisheries management policy often disrupts supply, potentially by opening or closing fishing areas, seasons, or changing Annual Catch Limits. While Hurricane Sandy was a specific shock to the activities of many fishery related businesses in the Mid-Atlantic and New England, understanding how businesses were impacted and adapted can provide insight into the general ability of processors to adapt to supply or demand caused by fishery policy. For example, if supply temporarily expands rapidly due to a regulatory change, this may lead to dramatic price declines if the supply and distribution network is not very flexible. If the quantity of fish supplied temporarily decreases due to a regulatory change, processors with low network capital may close if they because they cannot find alternative products with which to keep operating. Processors with large amount of network capital may be able to remain operational until supply stabilizes.

Knowledge of how fish is transferred from dealer to processor to end consumer will enable NMFS to fully and realistically and thoroughly describe the effects of fisheries management on the commercial fishing industry and regional economies. One way that this is currently done is by constructing regional input-output models using IMPLAN ${ }^{1}$. The results of these models are sensitive to the regional purchase coefficients (RPCs) that describe how goods and services move across different counties and states in the economy. NMFS currently assumes that the generic RPCs are correct; these data collected will allow NMFS to validate this assumption and, if necessary, update the data that is used in these models. This information collection will improve the agency's ability to describe economic and social impacts of alternative fishery regulations as required under MSA, NEPA, and E.O. 12866.

Section 404 of MSA requires a strategic plan for fisheries research. This addresses the research priorities for social and economic research in the Northeast region to:

- Broaden social and cultural investigation beyond fishermen, to include more women and those involved in fishing-related industries (such as processing workers)
- Continue to explore the use of GIS [Geographic Information Systems] to assist in describing and analyzing the social and cultural dimensions of fisheries and fishing communities
- Perform statistical analysis of changes in marine industries in regional economies over time, and investigate the relationships between these changes and resource conditions (NMFS 2007, p124-5).

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## 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 an in-person, structured interview by NMFS staff or contractor. We will use a multi-mode approach as described by Dillman et al (2009). We will make first contact by phone. If the phone number in the processed products report is not correct, we will make a mail contact. For respondents that choose to participate, we will followup with email or mail (as preferred by the respondent) that contains the discussion topics in the form of a question list, and appointment logistics. We do not have a "form" for the respondents to fill out. However, we plan to send a list of questions to the respondent (by email or postal mail) in advance of the interview, so that they can prepare for the interview (rather than actually answer questions) and make sure that the correct person is being interviewed. That list is attached.

## Purpose

The Social Sciences Branch (SSB) at the Northeast Fisheries Science Center will use this information for two purposes. Firstly, SSB will describe and understand the impacts of natural disasters on fishery related businesses. This will allow NMFS to better understand and respond to future natural disasters. Second, SSB will be able to describe and analyze the fish processing sector. This will contribute to better fishery management by (properly) considering the entire fishing industry, not just the extractive harvest sector. Reports and analyses using these data are expected to be valuable to the New England and Mid-Atlantic Fishery Management Councils in their decision making processes. Because this type of information has not been collected or utilized in the fishery management process, it is difficult to predict the exact uses of these analyses and reports.

## Types of information collected and rationale

There are four areas of information that will be collected: general information about the fish processing firm, Impacts of Hurricane Sandy and Adaptations to those impacts, Purchases and Sales of Fish, and Contracting \&New Markets.

## General Information

## Q1: In 2013, what limited the size of your business? The profitabilityof your business?

We will ask an open-ended question about current factors that limit operations and profitability of processors. Based on pre-testing, this may be the most important piece of information that the respondents will want to convey to fisheries managers. As an agency, NMFS knows very little about fish processing firms in the Northeast US. This question will also build rapport between the interviewer and respondent.

Expected Uses: These answers are likely to be related to the supply of domestic fish (both levels and volatility). Because Fisheries management Councils make decisions that directly and indirectly affect supply of domestic fish, collecting this data will lead to better understanding of how fisheries regulations are likely to impact fish processors.

## Impacts of Hurricane Sandy

Q2: How did Hurricane Sandy affect your business? How did you respond to these impacts?

This open-ended question will help NMFS understand the immediate impacts of Hurricane Sandy on businesses and how businesses coped with the disaster.

Expected Uses: This directly addresses the first goal of the survey, to understand how Hurricane Sandy directly impacted fish processors in the Northeast United States.

Q3: How many production workers per shift were working in Nov, 2012? Dec, 2012? How many hours per day was the plant operational? How many days per week was the plant operating? What percentage of typical operations do these represent?

Expected Uses: This will help NMFS understand the immediate impacts of Hurricane Sandy on employment (Hurricane Sandy made landfall in NY/NJ at the end of October, 2012). It will allow us to understand how operations changed.

Some of this information overlaps slightly with the employment questions administered in the ongoing NMFS processor survey (OMB Control No. 0648-0018). However, this question focuses on the "production" part of facility operations, which probably declined as a result of Hurricane Sandy. The processor survey includes all employees; in addition, it is possible that firms retained employees on payroll instead of letting them go. This change in operational status would not be captured by the processor survey. This directly addresses the first goal of the survey, to understand how Hurricane Sandy directly impacted fish processors in the Northeast United States.

Q4: During the two months following Hurricane Sandy (Nov. \& Dec. of 2012), how many of your sales contracts were canceled by your customers? What percentage of your sales volume does this represent? What is typical for this two-month period? When did your customers return and what did your firm do in response?

Q5: During the two months following Hurricane Sandy (Nov. \& Dec. of 2012), how many of your purchase contracts were canceled by your suppliers? What percentage of your purchasing volume does this represent? What is typical for this two-month period? When did your suppliers return and what did your firm do in response?

Hurricane Sandy may have affected both demand for finished products and supply of raw materials. Processors frequently engage in agreements with large, sophisticated clients to supply
fish at a specific price and time.
Expected Uses: Understanding the extent of changes in sales will provide a direct measure of the effects of Hurricane Sandy on processors. Understanding the extent of any changes in purchases of raw fish will provide a direct measure of the effects of Hurricane Sandy on processors.

In addition, this will allow fisheries managers to understand the flexibility of the supply chain. Fisheries policy often disrupts supply, potentially by opening or closing fishing areas, seasons, or changing Annual Catch Limits. If supply temporarily expands rapidly due to a regulatory change, this may lead to dramatic price declines if the supply and distribution network is not very flexible. If the quantity of fish supplied temporarily decreases due to a regulatory change, processors with low network capital may close if they because they cannot find alternative products with which to keep operating.

Purchases and Sales of Fish

## Q6: Approximately how much fish (by weight) did your facility purchase in 2013?

Understanding where fish are sourced from will improve our regional economic models and NMFS ability to analyze the impacts of alternative fisheries management policies on the regional economy as required under MSFCMA.

Expected Uses: SSB anticipates using the answers to question 4 to update and validate the NERIOM that is currently used to describe the effects of fishing regulation on the economy. The answers to question 5 give us information about the input side: for example, the firms in ME might purchase 20\% of their groundfish from ME, 10\% from the rest of New England, and the rest is imported from Canada.

## Q7: To which cities did your facility ship finfish and scallops in 2013? Approximately how much was shipped (by weight) to each city?

The answer to this question will give provide information about demand for finished products. Understanding where fish are sourced from will improve our regional economic models and NMFS ability to analyze the impacts of alternative fisheries management policies on the regional economy and all businesses which are using fish.

While collection of dollar-denominated information (instead of weights) in questions 4 and 5 would be ideal, pretesting revealed that asking about revenues and costs would be likely to reduce participation in this survey. However, NMFS collects data on prices (through the seafood dealer reporting system for primary sales and through the Market News and Processed Products programs for final product sales); therefore converting weights to dollars will be possible.

Expected Uses: SSB anticipates using the answers to question 5 to update and validate the regional Input-Output models that we use to describe the effects of fishing regulation on the
economy. The answers to question 5 will help us with the output side: for example, the firms in ME might sell $25 \%$ of their processed finfish to Portland, ME; $50 \%$ to Boston, MA; and the rest goes "out" of the Northeast region.

In addition, questions 5 and 6 will allow fisheries managers to take into the current network capital of fish processors. Processors with diverse upstream and downstream networks are less vulnerable to disruptions such as natural disasters, reductions in catch, or spatial closures of fishing grounds..

For example, consider a processor that buys scallops in New Bedford, MA and sells only that product at the Fulton Fish Market in New York. That specialization leave the processor highly exposed to shocks to the New York economy (like Hurricane Sandy) and to the New Bedford scallop industry. That firm might be stuck with rotting or lower quality scallops if there is a demand disruption. That firm may have difficulty purchasing scallops if there are closures of fishing grounds that are used primarily by New Bedford fishermen. In contrast, a diversified firm that sells many products (scallops, groundfish, and Norwegian salmon) to many markets (Boston, NY, DC) may be far less impacted.

## Reporting of Survey Results

Analyses and summarization of the Hurricane Sandy data will be used by NMFS, Congressional staff and the public to understand effects of the Hurricane and subsequent commercial fishery disaster on processors and employment. Analyses and summarization of data related to the role of fisheries processors in the regional economy will be used by NMFS, the Northeast Fisheries Management Council, and the Mid-Atlantic Fisheries Management Council, and the public to incorporate processor outcomes in policy and decision making. Qualified researchers with data access and confidentiality agreements will have access to raw data for performing economic research and analyses. It is anticipated that results will also be reported through academic publications, presentations at conferences, and technical guides. All reporting of survey results will conform to data confidentiality requirements.

## Information Quality Guidelines

It is anticipated that the information collected will be disseminated to the public or used to support publicly disseminated information. NMFS 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 Question 10 for information on confidentiality. Data will not be released for public use except in aggregate statistical form without identification as to its source. The information collection is designed to yield data that meet all applicable information quality guidelines. Prior to dissemination, the information will be subjected to quality control measures and a pre-dissemination review
pursuant to Section 515 of Public Law 106-554.

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

Automated, electronic, mechanical, or other technological techniques or other forms of information technology will not be used to collect this data. In-person interviews will be conducted. The information will be transcribed and entered into a database by the interviewer after the interview is complete. While this two-step procedure for collecting and storing information will increase the amount of time required by NMFS to process survey answers, an interview recorded with pen-and-paper has been successful in the past and is anticipated to provide the best data (Dirlam and Georgianna, 1994; Georgianna and Dirlam, 2001; Georgianna and Shrader, 2008)

## 4. Describe efforts to identify duplication.

NMFS currently conducts a nationwide survey of processors (OMB Control No. 0648-0018). That survey collects annual data on outputs, no information about inputs, and no information about marketing. The processor survey is administered once per year and data is not available until 7 months after the end of the calendar year. There is one question on the Processed Products survey "Number of persons working at this establishment during the payroll period that included the 12th of the month." In this information collection, we will ask about both employment and active operational time. We ask this because processing firms may have reduced employment status of workers, operating hours, or both in reaction to hurricane Sandy.

The Alaska Fisheries Science Center collected information regarding fishing and fish processing in Alaska (OMB Control No. 0648-0614). This proposed information collection does not overlap with this regional survey.

Staff at the Northeast Fisheries Science Center are preparing a one-year assessment of the impacts of Hurricane Sandy on commercial and recreational fishing industries in New York and New Jersey (August, 26, 2013; 78 FR 52761). That data collection will not include processing firms as part of the respondent universe, therefore no duplication is expected.

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

Nearly all potential respondents to the survey are expected to be classified as "Fresh and Frozen Seafood Processing" (NAICS 311712, size standard 500 employees). Based on the NMFS survey of processors, all respondents are expected to be small entities.

To minimize the burden while also maximizing information collected, we have relied on expert
academics in the field of fishery management research who have conducted interviews with processors to develop a survey which has the appropriate length. We have also pre-tested the survey instrument to ensure it is length appropriate. To minimize burden, we will conduct surveys at convenient times and locations for respondents (presumably at the processing plant and during business hours that are preferred). Participation in this information collection is strictly voluntary.
6. Describe the consequences to the Federal program or policy activities if the collection is not conducted or is conducted less frequently.

Not conducting the collection would reduce the ability of NMFS to fully assess impacts of future fishery management policies and to respond to fishery disasters in the future. In particular, the agency's knowledge of the processing segment of the fishing industry will continue to be poor.

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

Not Applicable.
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 5, 2013 (73 FR 40434-5) solicited public comments. No comments were received.

The survey was pretested on fewer than 10 members of the respondent universe. As part of the pretesting process, respondents helped us remove questions that were likely to be difficult to answer due to unavailable data and to refine questions and instructions that were unclear. These respondents also indicated that the time-burden estimate is reasonable, that the frequency of collection is not overly burdensome, and that data elements required to answer the questions are likely to be easily accessible.

## 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.

NMFS 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 and this assurance is included in the form. We have included text in the question guide that assures confidentiality as required by section 402(b) of the MagnusonStevens Act and NOAA Administrative Order 216-100, Confidentiality of Fisheries Statistics, and that the information will not be released for public use except in aggregate statistical form, without identification as to its source.

## 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 include matters that would be considered private.

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

Based on our pre-testing, we estimate that the respondent will need to spend approximately 30 minutes reviewing business records to prepare for the interview. Most of this time would be spent examining employment/payroll records, purchasing records, and shipping records (Questions 3-7).

Also based on our pre-testing, we estimate that the interview portion of the survey will last approximately 1 hour, for a total of 1 hour and 30 minutes per respondent. There are 62 potential respondents and a $70 \%$ response rate is expected ( 43 expected respondents). Therefore, the public burden is 65 hours (annualized to 14 responses and 22 hours per year). Respondents are likely to be "General and operations managers" (median weekly wage of $\$ 1,264^{2}$ ), "Purchasing agents, except wholesale, retail, and farm products" (\$987), or "Sales representatives, wholesale and manufacturing" ( $\$ 1,064$ ). The hourly labor cost for respondents is therefore likely to range from $\$ 24.68$ - 31.60 per hour. The labor cost (of the 65 hours) is estimated at $\$ 1,604-2,054$ for the entire information collection.

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

We estimate zero annual burden cost to the respondent (exclusive of the value of labor cost above). There are no capital or start-up costs. There are no operational costs.

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

The entire information collection project is expected to cost approximately $\$ 80,000$. Therefore, the annualized cost (over three years) is $\$ 26,667$ per year. This includes labor and travel costs for contractors totaling $\$ 70,000$ : assistance with survey development ( $\$ 5,000$ ), conducting and recording interviews (\$22,500), labor costs for encoding and storing data (\$7,500), performing analysis $(\$ 27,500)$, and project management $(\$ 7,500)$. In addition, one FTE (ZP-3) is expected to spend $10 \%$ of his time overseeing this project $(\$ 10,000)$.

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

Not Applicable. This is a new program.

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

Geographical, numerical, and textual survey information will be a product of this study. Survey data will be analyzed using standard economic and geographical data analysis methods. 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 submitted for publication in peer-reviewed journals to encourage additional analysis as well as to disseminate findings. Data will also be released to the public, but only in summary or tabular form. Data used to produce maps will also be aggregated in a way that preserves respondents' anonymity.

## 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.


[^0]:    ${ }^{1}$ IMPLAN (IMpact analysis for PLANning) is an economic modeling system that can be used to model the effects that changes in the supply of goods (like fish supplied) will have on output and employment in related industries in the regional economy.

[^1]:    2 http://www.bls.gov/cps/cpsaat39.htm

