

**SUPPORTING STATEMENT
ANNUAL ECONOMIC SURVEY OF FEDERAL GULF AND SOUTH ATLANTIC
SHRIMP PERMIT HOLDERS
OMB CONTROL NO. 0648-0591**

INTRODUCTION

We are requesting the revision and extension of a currently approved data collection.

Economic data is collected from vessel owners who operate in federal waters of the Gulf of Mexico and South Atlantic and who have one or more federal permits for the commercial catch of shrimp depending on species (penaeid or rock) and water body fished.

The Annual Economic Survey of Federal Gulf and Atlantic Shrimp Permit Holders is conducted by the Social Science Research Group of the Southeast Region Fishery Science Center (SEFSC) of the National Fisheries Marine Service (NMFS). Now in its 9th year, the survey collects data about operating expenses and the costs of owning and maintaining shrimp vessels. Each spring, surveys are sent by mail to a random sample of about a third of all vessels with federal permits for the harvest of Gulf of Mexico penaeid shrimp or South Atlantic penaeid or rock shrimp. The survey has been very successful, with high response rates. For the 2010-2012 data years, raw response rates by permit type and year have ranged from 79% to 91%; and 85% to 95% for an ineligibility adjusted response rate (the lower rates are for the open access permits where the population is more fluid).

With this extension, we are also requesting to add a crew component to the survey. We would like to add a short demographic/socioeconomic survey focused on the crews working the federally permitted vessels. Next to nothing is known about the roughly five thousand individuals crewing these vessels. Given the lack of a crew sampling frame, contacting crew through vessel owners---if successful, i.e., getting reasonably high response rate---would be a very cost effective way of collecting some data on these important stakeholders in the federal SE shrimp fisheries. In the absence of a frame, the only other approach would be dockside intercept sampling which is cost prohibitive and has its own practical and statistical problems (shrimp trips are often 3+ weeks long).

A collection of economic information from fishermen affected by the management of federal commercial fisheries is needed to ensure that national goals, objectives, and requirements of the Magnuson-Stevens Fishery Conservation and Management Act (MFCMA) and other laws are met. This information is vital in assessing the economic and social effects of management decisions and regulations on individual fishing enterprises, fishing communities, and the nation as a whole. Currently, the data are being used in Amendments 15, 16, 17A and 17B (in various stages) to the Gulf of Mexico Shrimp Fishery Management Plan. Since the survey is repeated annually, the data are also used to assess trends in the financial and economic state of the fisheries.

A. JUSTIFICATION

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

A collection of economic information from fishermen and fishing businesses affected by the management of federal commercial fisheries in the southeast region is needed to ensure that national goals, objectives, and requirements of the MFCMA, National Environmental Policy Act (NEPA), Regulatory Flexibility Act (RFA) and Executive Order 12866 (EO 12866) are met. This information is vital in assessing the economic and social effects of fishery management decisions and regulations on individual fishing enterprises, fishing communities, and the nation as a whole. Due to the persistent fluctuations in the price of fuel and the price of shrimp and other changes in the southeast shrimp fisheries, analyses and models require up-to-date data to remain valid.

The central goal of this project is to collect up-to-date cost data for the Gulf and South Atlantic commercial shrimp fisheries in federal waters. National Standard Guidelines for social and economic information needs are mandated in 50 CFR 600. In the past, legal decisions have gone against Department of Commerce (DOC), National Oceanic and Atmospheric Administration (NOAA), and NMFS based on the lack of social and economic information or the inadequate analysis of existing data. Thus, it is imperative that these data be collected to accurately assess the economic and social impacts on individual shrimp fishing entities as imposed by shrimp fishery management plans and regulations.

The data collection effort is an ongoing annual survey effort. Regular surveying is necessary to capture critical cost data that fluctuate from year to year. Fluctuations are generally due to annual fluctuations in shrimp abundance caused by environmental factors, input and output price variability and adaptations to these.

Economic information on commercial fishing enterprises is also vital to the optimum yield (OY) management of marine fishery resources as mandated under the MFCMA (16 U.S.C. 1802 MS Act § 3). The term “optimum” is defined under section 104-297 (28) of the Act, as: (A) will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems; (B) is prescribed as such on the basis of the maximum sustainable yield from the fishery, as reduced by any relevant economic, social, or ecological factors; and (C) in the case of an over-fished fishery, provides for the rebuilding to a level consistent with producing the maximum sustainable yield in such a fishery.

In the Southeast, fishing crews are a largely neglected element of the fisheries. Both Fishery Management Council and SE Regional Office staff writing regulations have requested (more) data about crews. Clearly, regulation that impacts vessel owners has the potential to impact crew members, and so the staff feel their regulatory impact analysis should at least attempt to cover crews.

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.

Combined with data from existing collections, the information is used by NMFS economists and social scientists to create, develop, and update economic and social models and descriptive reports of these important fisheries. The results support the management of the shrimp fisheries by the South Atlantic and Gulf Fisheries Management Councils and NMFS Southeast Regional Office. Foremost, the data are used to evaluate the economic health of the sector and the potential economic impact of proposed regulations. The frequency of the data use depends on the number and timing of Amendments to the Shrimp Fishery Management Plans. The data is also used by the academic community studying SE shrimp fisheries.

The results of this survey (summary statistics) are disseminated to the public through annual economic reports available on the SEFSC's website.

Statistical models that predict or forecast various characteristics, such as fleet size, fishing activity or effort, cost versus benefits of fishing, market activity, and efficiencies of proposed fishing regulations are further uses of these data. Gross revenues and costs can vary across time and geographic areas as a result of changes in a number of different factors, including fishery management regulations (e.g. gear modifications, time/area closures, etc.), fluctuations in abundance (due to changes in various environmental factors), market conditions (such as fuel or seafood prices), and behavioral responses by fishermen.

In general, the survey instrument asks questions pertaining to the annual total of variable costs, fixed costs, and other financial and production factors. These data are necessary to generate cost, profit, input demand, and production functions. Such functions and the results generated from their estimation are typically used in financial analyses (used to determine a business' cost efficiency and profitability), economic impact analyses (used to determine the economic value of a particular activity to a particular locale, community, or region), bio-economic models (used to predict how the biological and economic components of a fishery will respond to exogenous shocks, such as policy changes), cost-benefit analyses (used, in part, to determine the net economic benefits of a particular action), and behavioral models (such as those that explain or predict exit or entry decisions and decisions regarding spatial or temporal allocation of effort). These data can also be used to determine the relative efficiency of the various participating vessels in a fishery and thus whether the aggregate harvesting costs are in fact being minimized. Such models and analyses are critical to guiding fisheries management decisions whose general purpose is to maximize net national benefits and optimally distribute those benefits.

The following is a more detailed description of justifications for the collection of these data.

The survey is divided into three parts. It starts on page 1 with a pre-filled header section that serves to identify the respondent. The second section, also on page 1, collects information on annual financial expenditures ("cash costs"). These should correspond to receipts and invoices and the associated payments and should be readily available from regular business accounting. They are arranged into three blocks corresponding to variable costs (Questions 1 to 6), fixed costs (Questions 7 to 10), and a check for completeness (Question 11). Page 1 is set up to add up to the total financial expenditures of one calendar year. This should reduce the cognitive load and enhance internal consistency. These questions can generally be used to construct input demand function, cost functions, and production functions, all of which are needed to conduct the types of analyses mentioned previously. Distinguishing between variable and fixed costs is necessary for conducting analyses with different time horizons.

Expenditures do not fully reflect the economic concepts of costs (and hence profit); therefore, in order to facilitate economic analysis, further information is necessary, and this is collected on page 2. For example, loan principal payments are real financial transfers but do not constitute a cost in the economic sense. Depreciation charges are an example of the reverse, where real economic costs produce no corresponding financial transaction. Please see the attached survey instrument and its instructions for an in-depth explanation of the intent of each question.

Questions 12 to 15 deal with the economics of the vessel---the fixed factor of production. Questions 13 to 15 try to discern the total amount of financial capital invested in the vessel, the current value of that capital, the owner's net equity in the vessel, and the annual amount the capital is depreciating by. This information is required to estimate economic profit and then to calculate various rates of return on the owner's investment. The expected rate of return is a critical factor in the owner's decision to invest further in the vessel, and whether to remain in the fishing industry. Changes in the levels of net equity should be indicative of the industry's economic health. Question 12 collects information on the type of vessel insurance and the total amount for which the vessel is insured (coverage level). The lack of hull and other related vessel insurance is indicative of the industry's economic health. Further, the level of insurance coverage is a measure of how exposed this industry is toward risk, such as losses due to hurricanes. There is much policy interest in insurance-related questions.

Questions 16 to 18 provide information on activities and revenue by the vessel that are supplemental to the revenue from shrimping. Other data collection efforts allow us to calculate the total revenue each vessel generates from shrimp. In the case where a vessel also engages in other commercial fisheries, portions of the reported costs will apply to these activities rather than to the catching of shrimp. Hence these additional revenue data are needed to ensure that the total vessel costs collected on page 1 can be matched to total revenue---for a correct accounting of net revenues. The information also help sort vessel into categories, such as active Gulf shrimp vessel or non-commercial fishing vessel and how specialized the shrimp industry is.

At the bottom of the last page of the survey (page 2) an optional question asks the respondent for any comments and if they would like to receive annual results.

The new crew survey component anticipates asking basic demographic and socio-economic questions. It is an exploratory survey, as this has not been done before, to roughly characterize the population of crew members. Demographic questions include age, education, country of birth, marital status, home zip code, and household size, language, and types of income. Fishery oriented questions include tenure in fishing, position on vessel, fisheries active in, days worked within and outside of fisheries, and personal income from commercial fishing. A small set of new questions, related to and preceding the crew survey, but asked of the vessel owners has two purposes. First, it intends to motivate their active participation in the crew survey component (handing out forms) by asking questions pertinent to them, i.e., questions about availability of crew and churn, and to elicit their "commitment" to handing out the survey. Second, two questions relate to the share system used to compensate crew. Unlike salaried employees, many fishing crew share the financial risk involved in fishing.

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 response to Question 10 of this supporting statement for more

information on confidentiality and privacy. This 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.

The data collection is conducted as a self-administered mail survey. Given the southeast region's past experiences with surveys of this population, a very low impact (burden) approach is necessary to obtain fishermen's cooperation. A mail survey is less intrusive, more convenient, and less time-intensive than one based on in-person interviews.

All vessel owners are contacted by mail. They are asked to return the completed survey instrument to us in an enclosed, pre-paid envelope. If no response is received, up to two further letters are sent (including additional survey instruments). Non-responders are also contacted by phone and urged to return the survey. Information is not collected during the phone call (a further survey instrument is sent – by mail, fax, or email – if requested).

We will ask a subset of vessel owners to contact their crew members on our behalf. We will request that they distribute the 2-page crew survey (with attached return envelope) to their current crew.

There will be no other means, electronic or otherwise, to submit data or information for the purposes of this study. When asked in 2008, there was little interest by the industry for an online submission option for this survey. The survey responses will be entered into an electronic Oracle database by NMFS or a contractor. The *analytical results* of studies based on this data will be disseminated in internal, management related, and peer-reviewed publications. Some of these will be available over the Internet.

4. Describe efforts to identify duplication.

This is the only systematic, region-wide, and continuous economic data collection in the Gulf and South Atlantic shrimp fisheries. Hence, there is no duplication of economic information. Experts on these fisheries in academia and state agencies have been consulted.

The data collection is set up in a way to avoid duplicating the time burden for vessels that hold a Gulf shrimp moratorium permit and one or more South Atlantic shrimp permits. There are many vessels that hold the South Atlantic penaeid shrimp permit and the Gulf shrimp moratorium permits at the same time. Southeast commercial shrimp vessels will be treated as a single fleet for sampling purposes (thereby ensuring every vessel can only be selected once).

The proposed crew survey component would collect entirely new data. The only publication we are aware of that involved demographic data for the Gulf of Mexico shrimp fishery is very dated (1991) and focused on a tiny subset of the overall fishery (two bays in TX and LA).¹

¹ Nance, J.M., N. Garfield, and J.A. Paredes. 1991. A demographic profile of participants in two Gulf of Mexico inshore shrimp fisheries and their response to the Texas Closure. *Marine Fisheries Review* 53(1): 10-18.

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

To trawl for shrimp in federal waters of the Gulf of Mexico requires the use a large, specialized fishing vessel with 3-5 person crews. As such, owners must invest substantial sums to participate in this fishery (new vessels might cost anywhere from \$100,000 to \$1,000,000) and employ other individuals (mates; usually paid as contractors (1099-MISC) rather than hired as employees). About half the owners captain their own vessels (owner-operators; usual legal form: sole proprietors or S-corporations), while the other half hire captains. Some own multiple vessels. As such, they all run small businesses.

Only the minimum data to meet the current and future needs of NMFS management and permitting programs are collected. The information requested should be available to the respondent in the course of normal business operations. Keeping additional records is not needed and hence the burden is low. To simplify the process further, the survey collects aggregate annual data and will be timed to coincide with tax season. The results of this study are expected to improve the economic conditions of small fishing entities by affording fishery management agencies the information needed to consider economic factors in management plans and regulations.

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

Previous attempts to collect costs data have been plagued by their small geographic scope, their limited duration, refusal by the industry to be surveyed, and delineation issues between inshore and offshore fleets. Current and statistically valid economic data is needed for the southeast shrimp fisheries in order to accurately assess the positive and negative impacts of federal rules and regulations. Such assessments are mandated under EO 12866, the RFA, MFCMA (and the National Standards attached thereto), and the Endangered Species Act, among others. Additionally, legal decisions against the federal government have been handed down based on the absence of social and economic data (i.e. summer flounder litigation: North Carolina Fisheries Association, et al. versus Daley - Civil Nos. 2: 97cv339; 2: 98cv606).

If current and accurate economic data are not available, then the social and economic assessments of management alternatives will be impossible or inaccurate, thereby potentially leading the Council and NMFS to make poor management decisions. Thus, continuous economic data collection is needed to satisfy these various mandates and help ensure that good management decisions are made.

The purpose of collecting this data *annually* is to identify and track changes and trends through time. This fishery has recently been experiencing substantial upheaval (dumping of product on the U.S. market by foreign competition and large fuel price fluctuations; hurricane and oil spill impacts). Further reasons to collect this data annually include the paucity of existing economic data in the shrimp fishery (especially about costs); the fact that there can be wide fluctuations in all costs, not just variable, from year to year; and that future, proposed management strategies are substantially different from the current management structure. In the absence of annual data, the Council and NMFS cannot satisfy the various mandates described above and in the response to Question 1; cannot fully assess the social and economic impacts of potential management

changes; and generally cannot ensure that good management decisions are made.

Crews working in this industry would continue to be a complete unknown element in these fisheries.

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

The collection is consistent with OMB guidelines.

8. Provide information on the PRA Federal Register Notice that solicited public comments on the information collection prior to this submission. Summarize the public comments received in response to that notice and describe the actions taken by the agency in response to those comments. Describe the efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

A Federal Register Notice was published on May 20, 2015 (Vol. 80, No. 97, 28974-5) for the revision and extension of this data collection. Public comments were solicited on the proposed data collection reporting program. No comments were received.

When this data collection program was originally designed and implemented in the Gulf shrimp fishery and later in the South Atlantic shrimp fishery, efforts were made to contact persons knowledgeable about these fisheries. Experts both inside and outside the agency have been consulted, including federal and state fishery managers, scientists, and port agents (government), as well as academics, shrimp associations and fishermen (external). We collected their views on the availability of the requested data, frequency of collection, the clarity of the instrument and instructions, disclosure, making it a requirement, survey methodology, and on the data elements to be recorded, disclosed, or reported. NMFS has established that the data to be obtained through this survey is not currently available, and this is discussed in response to Question 4 above.

In May 2015, Prof. Marty Smith at Duke University, commented to me that the annual economic reports on the SE shrimp fisheries (available on the SEFSC website) were very useful, especially in the aftermath of the BP DWH-oil spill event in 2010.

In September 2015, Assane Diagne, staff economist with the Gulf of Mexico Fisheries Management Council, confirmed that these economic data are useful to have for the management of the Gulf of Mexico shrimp fishery. Economic results derived from this survey feature prominently in current regulatory actions (Amendment 15, 16, 17A, and 17B).

Throughout our annual survey effort (including during 2015), the principal investigator and a contractor/student speak with many survey respondent concerning help/questions about the questionnaire, the inability to participate or requesting extensions, reminder calls, and, especially, NMFS initiated call-backs to clarify entries or fill in blanks [to be useful, economic surveys require a high level of completion, e.g., to calculate net revenue, we need values for all revenue and cost components]. During these calls, we regularly discuss how long it takes---or should take---to complete the survey. While there is huge variation among respondents, for

respondent with financial records (most respondents), the entire processing of the survey is likely to be less than 30 minutes.² For individuals without accounting records, especially if they try to add up receipts, the process could be substantially longer. When we speak to this latter group we always instruct them to provide us with their best estimate and that the survey should take no longer than 45 minutes to complete.

Our respondents are a regulated industry composed of fiercely independent individuals (often vessel captains). In general, they do not think well of NMFS (or the federal government). With the 2012-2014 data collections, among the 1,709 returned surveys, we received 195 write-in comments (11%). Of the comments, only about one in ten is related to the survey design (#3), conduct (#9), or an appeal to NOAA (#7) (the concern specific financial or individual content). The three design comments claim to have been selected “every year”---they are not---but they probably get confused because of the existence of other SE shrimp forms which are mailed annually to every permit holder. Of the conduct-related comments, 8 are critical of the survey and/or the federal government (“none of your business”, “#16-19: not the business of NOAA”, “government waste”, etc.), while 1 is supportive (likes the Vietnamese translations). The “appeal to NOAA” comments raise other issues and asks for NOAA and/or government to get involved. For instance, some worry about “marsh management systems killing juvenile shrimp”, others want NOAA to regulate shrimp prices and prevent shrimp imports.

Comments submitted with 2012 PRA renewal request (still relevant):

Minimizing the burden of this data collection was the primary concern during design. Quite complicated and comprehensive subject matter---annual financial information---is collected with a two-page mail survey. The room for simplifying the survey further---without reducing the information collected---is limited.

Each year, prior to survey implementation, we attempt to enhance comprehension and simplify the survey instrument based on the type of problems encountered with the previous year’s survey. We attempt to address the most frequently occurring problems. We use call-backs (conducted to get or verify questionable answers) to understand the difficulties respondents encountered. In this way, over the years, we have:

- Discarded a footnote (with definitions) that complicated the survey (the information is still in the instructions).
- Removed horizontal lines that were being interpreted as ‘subtotals’ by some respondents.
- Rearranged question sequence on page 1.
- Clarified language.
- Added examples to cost categories.
- Moved questions from page 2 to page 1 to enhance the logical flow.

With the 2007 survey, we asked respondents “In the future, would you prefer to fill out this survey online rather than on paper?” Only 61 out of 505 respondents (12%) answered yes. At that time, the interest was deemed insufficient to justify building an online reporting tool, given the substantial costs involved in developing, running, and regularly updating such a tool.

² In fact, it is often the “simple” fuel gallons or price questions that office-based respondents have a hard time filling out. While they have access to all financial records (and can answer all the rest of the questions), accounting records do not usually drill down to fuel price or gallons. [We ask them to estimate or get an estimate of fuel price and then calculate gallons based on that.]

For the first three years, we have also asked respondent to “Please use the reverse side or a separate piece of paper for any comments. We appreciate any comments concerning this survey effort and any ideas on how to improve or simplify it.” [In recent years, simplified to: “Please use the reverse side or a separate piece of paper for any comments. We appreciate any comments.”] Between 2006 and 2011, on the roughly 3,412 eligible returned surveys, we have received 493 comments (14%). Of the comments, only about one in twenty (~5%) are related to the survey design or conduct rather than the specific financial or individual content. Of the survey related comments, about half are critical of the survey (and/or the federal government) in its entirety, while about 20% are supportive. The rest made specific recommendations, including having the survey mailed earlier in the year (3x) [*the first year we mailed in May; then moved to late March; in recent years, we try for late February/early March (the sampling frame in only available in late January)*] and the “form doesn’t accommodate husband-wife operations well” (2x) [*true, but they are a very small minority of the sampled population*].

The principal investigator has also explored the feasibility of an entirely different approach for collecting annual financial information. As part of the Capital Construction Fund program, NMFS receives a substantial number of tax returns each year. It was thought that these tax returns might 1) provide enough information to track the SE shrimp industry without the survey, or, at least, 2) allow us to rephrase questions on the survey to request specific tax information (e.g., “provide line 23 on your 1040”). Regrettably, for a variety of reasons, extracting useful economic data from the CCF archive is not possible. Major problems included the CCF’s lack of representativeness of the SE shrimp fishery and the wide variety of tax-entities (sole-proprietor, corporations, LLCs, multi-vessel operations, etc.) and resulting tax forms and information, which made extracting standardized economic data near impossible.

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

No monetary payments or other remuneration will be made to respondents.

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

The cover letter sent with the survey states that all data that are submitted are treated as confidential, in accordance with NOAA Administrative Order 216-100 and the Magnuson-Stevens Act, Section 402(b), Confidentiality of Information.

The proposed crew survey component is anonymous, so confidentiality is guaranteed.

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 questions will be asked of survey participants about sexual behavior and attitudes, religious beliefs, or similar sensitive activities. Questions pertaining to a respondent’s business costs and expenses will be used, together with revenue data collected elsewhere, to establish their profitability. Business income (not *directly* collected) is sometimes considered private. This information is necessary for the development of economic assessment models and analyses

described extensively in Questions 1 and 2. The data are used and reported only at the aggregate or representative (average) levels. The respondents are informed of this in the cover letter.

The proposed crew survey component, which asks for personal income, is anonymous, so confidentiality is guaranteed.

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

The number of Gulf of Mexico moratorium permits continues to decline. As a result, we are reducing the requested number of vessel owner respondents from 800 to 650 per year. To allow for possible fluctuations in the survey population over the next three years (the South Atlantic penaeid and rock shrimp permits are open access), we are asking for burden hours equivalent to completing a total of 650 surveys. The public reporting burden for this collection of information is estimated to average 45 minutes per response including the time for reading the instructions, gathering the data from business records, and completing and mailing the survey instrument. As a result, we require 488 hours for the original vessel owner component of the survey (a reduction of 112 hours).

Additionally, we are requesting to conduct an add-on survey of crew members, and hence, an additional 300 burden hours for administering this component of the survey. On average per year, we are anticipating asking vessel owners to distribute up to 1,200 survey packages to crew members on our behalf. We estimate the brief survey will take 15 minutes per crew respondent to complete.

In total we are requesting an annual burden of up to 788 hours ($45/60 \text{ minutes} \times 650 + 15/60 \times 1,200$).

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).

There will be no financial cost to the public to participate in this study.

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

This study will be conducted by the Social Science Research Group of the SEFSC of NMFS. This includes annual development of the sampling frame and sampling, conducting the survey, administration and supervision of a student intern or contractor, continued database development, and preparation of reports.

The total annual cost of this data collection (including staff time) is estimated at about \$50,000 per year. The estimate of annual costs for NMFS staff involvement is \$30,000 (staff time and benefits). In recent years, \$18,000 was spent to hire a student intern or contractor to help with the implementation of the survey, including mail handling, telephone follow-up, and data entry and verification. Additional cash expenses are approximately \$2,000 for supplies and postage.

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

No changes or adjustments are requested for the economic survey of vessel owners (other than the burden hours change related to the population size change mentioned above).

Program Change: New crew survey will add 300 hours. Most federally permitted shrimp vessels in the Southeast are operated by 3 to 4 crew members, including the captain. We estimate that there are over 5000 hired crew members working in the federal shrimp fisheries of the southeast US. These individuals are almost entirely unstudied (and ignored in the management process). No sampling frame is available for this population (as there is no crew permit in the Southeast). We propose to contact them by asking a (random) subset of selected vessel owners to hand a 2-page survey questionnaire (with attached return envelope) to their current crew members, thereby making the crew member survey subsidiary to the vessel owner survey. There is no way to know in advance how well this setup will work, and what type of response we will receive. We have spoken to a couple of owners who seemed willing to participate, and have not encountered significant objections. Our questions for the crew members are very basic and demographic in nature. The goal of this new element of the data collection is to provide some broad, rough information where no information currently exists. The only alternative method for collecting information from this crew population would be an expensive and difficult-to-organize dockside intercept survey (especially since typical shrimp trips often take 3 weeks or more; and access to private docks is not guaranteed; the NE recently tried).

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

Summary statistics of these data are published in standardized tables in annual NMFS economic reports; one for the Gulf and one for the South Atlantic shrimp fisheries. These reports provide documentation about the survey methodologies, survey instrument, statistical and random sampling design, an assessment of the validity of the collected data, and basic descriptive statistics (see Table 2 at the end of this supporting statement as an example). The reports are available on the web at: <http://www.sefsc.noaa.gov/socialscience/shrimp.htm>. The *analytical results* of studies based on this data will be disseminated in internal, management related, and peer-reviewed publications. Some of these will be available over the internet. If the crew member survey component is a success (reasonably high response rate), the results will be published in a self-standing 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 identified in Item 19 of the OMB 83-I.

Not Applicable.