

**SUPPORTING STATEMENT  
SOCIO-ECONOMIC ASSESSMENT OF SNAPPER GROUPER (SASG) FISHERIES IN  
THE U.S. CARIBBEAN  
OMB CONTROL NO. 0648-XXXX**

**A. JUSTIFICATION**

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

This request is for a new information collection.

The National Marine Fisheries Service (NMFS) proposes the collection of demographic, economic and social information about the deep-water snapper fishery in the Commonwealth of Puerto Rico and the U.S. Virgin Islands. The proposed survey also intends to inquire about industry's perceptions, attitudes and beliefs regarding the potential use of catch shares and other existing regulations to improve the management of these fisheries. The local fishing industry and the Caribbean Fishery Management Council are investigating the feasibility of adopting a catch share program in the region. Catch shares is a type of limited access privilege program (LAPP), in which fishermen are vested with an exclusive harvesting privilege, which entitles them to land a share of the total allowable catch (TAC). Granting a secure harvesting privilege mitigates the race to fish because fishermen no longer have to compete for a share of the stock. Thus, fishermen can devote their efforts to maximizing profits by harvesting, processing, and marketing their catch more efficiently.

The data gathered will be used to describe the current (baseline) socioeconomic condition of these fisheries and offer insight into fishermen's concerns about a potential catch share program, which could be used to tailor a potential program. In addition, the information collected will enable the development of quantitative economic models to investigate future changes subsequent to the implementation of a catch share program. Moreover, the information gathered will be used to strengthen and improve fishery management decision-making, satisfy legal mandates under the Reauthorization of the [Magnuson-Stevens Act](#) (MSA), the [Regulatory Flexibility Act](#), the [Endangered Species Act](#), and the [National Environmental Policy Act](#), [Executive Order 12866](#), and other pertinent statutes.

The data collection is necessary to satisfy the requirements of the MSA (16 U.S.C. 1853a *et seq.*), which mandates that LAPPs submitted by a Council or approved by the Secretary shall "include provisions for the regular monitoring and review by the Council and the Secretary of the operations of the program, including determining progress in meeting the goals of the program and this Act, and any necessary modification of the program to meet those goals, with a formal and detailed review 5 years after the implementation of the program, and thereafter to coincide with scheduled Council review of the relevant fishery management plan (but no less frequently than once every 7 years)"

Moreover, the MSA states that collection of reliable data is essential to the effective conservation, management, and scientific understanding of the fishery resources of the United States. The nation's fisheries should be "conserved and maintained so as to provide optimum yields (OYs) on a continuing basis". The MSA also requires that fishery management plans must include a Fishery Impact Statement (FIS), which assesses, specifies, and describes the likely

effects of the conservation and management measures on participants in the fisheries being managed, fishing communities dependent on these fisheries, and participants in fisheries in adjacent areas.

In addition to the needs of the MSA, the Regulatory Flexibility Act (RFA, 5 U.S.C. 601 *et seq.*), the National Environmental Policy Act (NEPA, 42 U.S.C. 4372 *et seq.*), and Executive Order (EO) 12866 also require socio-economic data collections. Under the RFA, the Small Business Administration needs a determination of whether a proposed rule has a significant impact on a substantial number of small entities that are to be directly regulated. For RFA purposes, one of the criteria to determine significant economic impact involves an assessment of the change in short-term accounting profits for small entities. The NEPA requires a determination of whether Federal actions significantly affect the human environment. This requires a number of economic analyses including the impact on entities that are directly regulated and those that are indirectly affected. Lastly, EO 12866 mandates an economic analysis of the benefits and costs to society of each regulatory alternative considered by the fishery management councils, and a determination of whether the rule is significant.

**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.**

Ms. Flavia Tonioli from the Cooperative Institute for Marine and Atmospheric Studies (CIMAS) at the University of Miami has been contracted to conduct one-time, in-person interviews. The proposed questionnaire will collect information on demographic and socio-economic characteristics of the deep-water snapper fishery and fishermen's perceptions about the potential use of catch shares and other existing regulations.

Combined with catch and effort data from existing collections, the information sought will be utilized for descriptive and analytical purposes. Social scientists from NMFS will create descriptive reports of the fishery and develop models to evaluate the socio-economic impacts of a catch share program implementation. In addition, the information collected will be used for the development of natural resource plans. The survey will collect demographic, cultural, economic and social information, which otherwise would be unavailable. The data will also be used by the academic community studying the performance of LAPPs around the nation.

The survey instrument has the following sections: 1) Demographic background; 2) Fishing practices and capital investment; 3) Costs and earnings; 4) Attitudes and perceptions concerning the deep-water snapper catch share program; and 5) Perceptions about existing regulations.

Section 1: The 'background information' section elicits information about fisherman's demographic characteristics. It elicits information about the fisherman's age, educational attainment, number of dependents, participation (i.e., full-time vs. part-time), percentage income derived from fishing and non-fishing activities, vessel and gear ownership, and marketing channels. This information is valuable to profile fishermen who partake in the deep-water snapper fishery.

Section 2: The 'fishing practices and capital investment' section inquires about the main gears

used and species targeted, time devoted to fishing activities, capital stock (i.e., investments in fishing vessels, gear and equipment) and general characteristics about the fishing vessels and gears (e.g., length, engine horsepower, longevity/useful life, etc.). The information collected in this section will be used to estimate the opportunity cost of capital and economic depreciation. In efficient markets, market prices should reflect the economic (opportunity) cost of inputs. Straight-line depreciation is calculated by the difference between the purchase cost of the asset and the residual value of the asset, divided over the useful economic life of the asset. A small sub-set of the population, namely those with more experience in the fishery (folks with more than 10 years of experience fishing for deep-water snappers and grouper), will be asked to briefly discuss the historical evolution of the fishery.

Section 3: The ‘costs and earnings’ section solicits information about earnings and variable costs, which are those expenses incurred during the operation of the vessel. These vary with the level of harvesting activity. Variable costs can be further categorized into operating expenses, which include fuel, lubricants, bait, ice, food, and supplies, and into crew labor expenses. Generally, crew wages are paid as a share of the trip’s revenue after deducting operating expenses. This information will enable the development of quantitative economic models to investigate future changes in excess and overcapacity and ‘cost savings’ brought about the catch program (if implemented).

Section 4: The ‘attitudes and perceptions about the potential use of catch shares’ section elicits information about fishermen’s attitudes, opinions and perceptions towards catch share and/or harvesting privilege based programs. This section also inquires about fishermen’s views on the need and usefulness of a catch share program, preferences about selling and leasing of shares, requirements and mechanisms for the initial allocation of shares. This information will enable the fishery managers facilitate the design of a potential program by identifying areas of agreement (and disagreement) between the various stakeholders.

Section 5: The ‘perceptions about existing regulations’ section will solicit information about their socio-economic performance and recommendations for improving their effectiveness. This information will be used to examine the cumulative impacts of the potential use of catch shares (if implemented).

It is anticipated that the information collected will be disseminated to the public or used to support publicly disseminated information. NOAA 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 to yield data that meet all applicable information quality guidelines. Prior to dissemination, the information will be subject 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 proposed data collection will utilize in-person interviews. A sampling frame (i.e., list of the universe of potential fishermen operating in the deep-water snapper fishery) will be developed through several sources of information, including licensing reports, catch trip tickets, 2008 Puerto Rican fishermen census, 2011 U.S. Virgin Island fishermen census, and key informants, which include federal and commonwealth fishery managers and industry leaders.

The contractor does not anticipate interviewers using laptops or other computers to directly enter the answers being provided since some of the questions are open ended. Thus, typing verbatim could extend the length of the interview, which would further burden the interviewees and result in incomplete surveys.

The data collected will not be available to the public over the internet given its confidential nature. However, analytical results of studies based on this data will be disseminated to management agencies and peer-reviewed publications. Some of these studies will likely be available online.

**4. Describe efforts to identify duplication.**

There are no known data collections that will target deep-water snapper fishermen in this geographic area during the time period we intend to conduct our interviews. Although we are not familiar with any studies exploring the use of catch shares in the U.S. Caribbean, there have been commercial fishermen censuses conducted in the area (e.g., Kojis and Quinn, 2011).<sup>1</sup>A study examining the performance of limited access privilege programs (catch shares) is currently being conducted in the Gulf of Mexico red snapper fishery by Dr. Walter Keithly (OMB CONTROL NUMBER: 0648-0622). The contractor has informed Caribbean Fishery Management Council staff and fisheries officials from the appropriate territories about the proposed data collection.

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

Many commercial fishing operations are owner- or family-operated small businesses. We have taken several steps to minimize the burden to these small businesses. First, we designed the survey instrument so that only the minimum data requirements for present and future management needs are collected. Second, responses to the in-person survey will be voluntary. Fishermen, who do not wish to participate in the interviews, can choose not to partake. Last, in-person surveys will be conducted at times and places that are convenient to fishermen. This will minimize any potential disruption to fishermen's fishing practices.

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

The proposed study will provide information on social and economic conditions of the deep-water snapper fishery in the Puerto Rico and the U.S. Virgin Islands. Armed with this

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<sup>1</sup> Barbara L. Kojis y Norman J. Quinn, *Census of the Marine Commercial Fishers of the U.S. Virgin Islands*, 2011.

information, scientists will be able to better inform decision-makers about the fishermen's level of support and major concerns about the program (if adopted). If this information was not collected (or collected less frequently), then CFMC would not be able to adequately satisfy the legal requirements put forth by the MSA, NEPA, and EO 12866, to implement a catch share program. These mandates require regional fishery management councils to establish conservation and management measures which take into account the importance of fishery resources to fishing communities in order to provide sustained fishing community participation and to minimize, to the extent possible, adverse economic impacts on such communities. Furthermore, these requirements also mandate that regional fishery management councils establish conservation and management measures using the best available information.

The absence of detailed economic and social information would limit the Agency's ability to: a) identify communities that would be impacted by this proposed program, b) quantify the impacts of this program (again, if adopted), and c) reduce the likelihood of unforeseen impacts of a potential catch share plan. Management proposals would continue to be debated with limited sound information. Another consequence of not having the appropriate economic data could be court challenges on the grounds of inadequate analysis. Last, the collection of detailed socio-economic data will, allow fishery managers to make timely and better-informed decisions by having the best scientific information available.

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

There are no special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.

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

A Federal Register Notice published on Wednesday, October 13, 2010 (75 FR 62762) solicited public comments. No public comments were received.

Results of consultations with persons outside the agency:

A series of exchanges between the contractor, Caribbean Fishery Management Council (CFMC) staff and members of the CFMC Catch Share Advisory Panel were held to explain the need and content of the survey and to obtain their views on the clarity of the instructions and data elements to be recorded.

The CFMC, like other regional fishery management councils, regularly establishes advisory panels made up of industry representatives who offer their advice on the specifications of management regulations, with particular regard to, among other things, the capacity and the extent to which the fishing will harvest the resources considered in fishery management plans;

the effect of such fishery management plans on local economies and social structures, and potential conflicts between user groups of a given fishery resource.

The CFMC Advisory Panel on Catch Shares is made up of active deep-water snapper fishermen who operate in the U.S. Caribbean waters.

**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 questionnaire respondents.

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

As stated on the forms, survey respondents will be advised that any information provided will be considered private and will be treated as confidential in accordance with [NOAA Administrative Order 216-100](#), Confidential Fisheries Statistics and section 402(b) of the MSA (16 U.S.C. 1881, *et seq.*).

It is NMFS' policy not to release confidential data, other than in aggregate form, as the MSA protects (in perpetuity) the confidentiality of those submitting data. Whenever data are requested, the Agency will ensure that information identifying the pecuniary business activity of a particular individual is not identified. Only group averages or group totals will be presented in any reports, publications, or oral presentations of the study's results.

**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 about sexual behavior and attitudes, religious beliefs, or other similar matters of a personal and sensitive nature.

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

It is estimated that the number of respondents will be no more than 250 and the time per response will be about 1 hour, for a total annual burden of 250 hours (we are anticipating a response rate of 80%, but are requesting approval for the maximum burden hours). The one hour per response burden includes the time for reading the instructions, reviewing the questions, and completing (and mailing, if necessary) the survey instrument. This estimate is based on the type of questions asked, length of the survey instrument, and contractor's past experience conducting similar surveys.

**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.**

A fixed price contract of \$92,000 will be awarded to Ms. Flavia Tonioli from the Cooperative Institute for Marine and Atmospheric Studies (CIMAS) at the University of Miami. The contractor is responsible for the development of survey instrument, training interviewers, printing of forms, data collection and processing, quality control, data entry and supervision. Additional federal costs include the time of NMFS staff. The NMFS staff will be responsible for developing and administering the contract and collaborating with the development of the survey. The cost of NMFS staff time is estimated at \$10,000. Thus, the total annualized (for one year) cost to the federal government would be \$102,000.

**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.**

Data collected will be used to assess the potential use of a catch share program in the deep-water snapper-grouper fishery. Descriptive and analytical reports will include summaries of data. These reports will not release or reveal confidential information. Depending on the availability of funds, we anticipate that reports will be available January 2013. These reports will likely be available in *pdf* format on the NMFS Southeast Fisheries Science Center's web site.

**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.

