SUPPORTING STATEMENT MARINE RECREATIONAL INFORMATION PROGRAM ACCESS-POINT ANGLER INTERCEPT SURVEY 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.

Collection of recreational fisheries catch and effort data is necessary to fulfill statutory requirements of Section 303 of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1852 et. seq.) and to comply with Executive Order 12962 on Recreational Fisheries. Section 303 (a) of the Magnuson-Stevens Act specifies data and analyses to be included in Fishery Management Plans (FMPs), as well as pertinent data that shall be submitted to the Secretary of Commerce under the plan.

Traditionally, recreational fishing catch data (numbers and species of fish) have been collected through the Marine Recreational Fishery Statistics Survey (MRFSS) Access-Point Angler Intercept Survey (APAIS), an in-person site-day sampling survey of recreational anglers who have completed fishing for the day (OMB Control No. 0648-0052). In recent years, the precision and accuracy of the catch statistics have been questioned due to changes in fisheries management and the need for more accurate statistics at greater levels of resolution. To address concerns about the MRFSS, the National Marine Fisheries Service (NMFS) commissioned a review of its marine recreational fishing surveys by the National Research Council (NRC) of the National Academies of Science. The NRC Review concluded that existing recreational fishing surveys are inadequate for sampling the universe of anglers and for determining their catch and effort (NRC, 2006).

Specific recommendations and conclusions from the NRC Review include the following:

- "Both the telephone and access components of the current approach have serious flaws in design or implementation and use inadequate analysis methods that need to be addressed immediately.";
- "... the estimation procedure for information gathered onsite does not use the nominal or actual selection probabilities of the sample design and, therefore, has the potential to produce biased estimates of both the parameters of interest and their variances";
- "The field personnel have considerable latitude in how they go about intercepting anglers.";
- "... errors in estimating the expected angling intensity and failure to account for expected angling intensity in the estimation process can lead to both increased variance and bias in the CPUE estimates.".

NMFS has addressed these concerns by implementing the Marine Recreational Information Program (MRIP). The MRIP program has used a combination of expert consultants, partner

statisticians and survey managers, and staff to design and test new survey methodologies for catch and effort data collections and estimation. The MRIP APAIS is the result of external review and re-design of the MRFSS' APAIS by expert survey statisticians and addresses the issues of field sampler influence, potential bias in sampling low-use sites, unknown sampling probabilities due to haphazard site selection and re-scheduling of site-days, and design and estimation inconsistencies.

A review of the MRFSS APAIS sampling and estimation methodologies identified potential sources of error in the designs (Breidt et al. 2011). It was noted the weighted estimation method will only provide correct estimates of mean catch rates "when the sampling, data collection, and data processing for the APAIS are conducted in accordance with the documented sampling design". Errors could be introduced into the weighted estimator if the data structure is not arranged to accurately reflect the stratified, probability-proportional-to-size (PPS) multistage sampling design, or if the field samplers misinterpret the sampling and measurement protocols. More formalized sampling protocols with stricter control of sampler behavior are needed to ensure that a probability sample is consistently obtained and potential biases are eliminated or minimized.

This request is to implement a new Access-Point Angler Intercept Survey process that will eliminate sources of bias in the current MRFSS APAIS, and provide more accurate estimates of catch-rates with improved estimates of total variance. The new APAIS will be implemented in Maine through Florida on the Atlantic Coast, and in Florida through Louisiana on the Gulf Coast, Hawaii, and Puerto Rico. On the Atlantic Coast, Maine and New Hampshire will be surveyed in three waves per year (May-Jun, Jul-Aug, Sep-Oct), Massachusetts-Virginia, South Carolina, and Georgia will be surveyed in 5 waves per year (Mar-Apr – Nov-Dec), and North Carolina, the Gulf States, Hawaii, and Puerto Rico will be surveyed in all 6 waves per year (Jan-Feb – Nov-Dec). These specific sampling periods by state or region encompass the majority of the recreational fishery seasons. Prior surveys indicated recreational fishing outside these periods was rare, contributed a very small percentage of annual landings of managed fishes, and would be disproportionately expensive to estimate precisely. The period of this request is for 2013 – 2015. This new APAIS will be based on the current MRFSS angler interview and will become the new ongoing data collection program.

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.

The MRIP APAIS estimates catch per trip by species. This information is combined with effort data collected through offsite surveys of fishing effort to estimate total catch by species. These recreational fishing catch and effort estimates are used on an ongoing basis by NMFS, regional fishery management councils, interstate marine fisheries commissions and state natural resource agencies in developing, implementing and monitoring fishery management programs, per statutory requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Catch and effort statistics are fundamental for assessing the influence of fishing on any fish stock. Accurate estimates of the quantities

taken, fishing effort, and both the seasonal and geographic distributions of the catch and effort are required for the development of regional management policies and plans.

The MRIP APAIS will provide more accurate recreational fishing catch and catch-rate data by eliminating or reducing the biases associated with the previous MRFSS APAIS. The APAIS uses site clusters and time intervals to dictate where and when the field interviewer collects data, eliminating sampling site and time choices by the field staff, thus eliminating sources of potential bias and unknown probability of selection. The angler counts obtained as an element of data collection will be used to compute the weight for each sample, thus eliminating the need to use the 'expected' angler activity as a weighting mechanism, another potential source of bias. Therefore, this new survey will allow estimation of recreational fishing catch-per-unit-effort with improved accuracy based on the survey design and improved precision for favored species/regions to meet assessment, monitoring, and management needs.

National Oceanic and Atmospheric Administration's (NOAA) Fisheries 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. The data collected by the APAIS will be subject to the quality control measures and pre-dissemination review pursuant to Section 515 of Public Law 106-554.

3. <u>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.</u>

The surveys will be conducted in person and responses recorded on paper forms. At the discretion of the contractor conducting the field interviewing the responses may be captured through optical character recognition (OCR) if scanable forms are used, which would greatly increase the accuracy and efficiency of data collection. Otherwise, manual key-entry of survey data will be used. Potential pilot studies to support electronic capture using laptop or tablet PCs, smartphones, or handheld data loggers will be investigated pending available fund identification.

4. Describe efforts to identify duplication.

NMFS collaborates with state natural resource agencies and regional interstate fisheries commissions on the Atlantic and Gulf coasts to ensure that recreational fisheries data collections are not duplicative. Every five years, the Fish and Wildlife Service (FWS) of the U.S. Department of the Interior conducts the National Survey of Fishing, Hunting and Wildlife-Associated Recreation (OMB Control No. 1018-0088). This survey collects minimal information about annual recreational saltwater fishing activity within the context of additional recreation activities. That survey does not provide the spatial or temporal resolution needed by managers of fishery resources to monitor and manage recreational fisheries landings.

The MRIP APAIS Head Boat mode sampling and estimation overlaps with the Southeast Head Boat Logbook Program (SEHB) conducted by the Beaufort Laboratory of the NMFS Southeast Fisheries Science Center (OMB No. 0648-0016). The SEHB includes only head boats that typically target reef-fish species, whereas the APAIS coverage includes all identified head boats in the region, regardless of target or landed species. Estimates of head boat effort are produced by the NMFS For-Hire Survey (OMB No. 0648-0052) and will be complemented by the catch rate data collected by this APAIS for production of catch estimates for the known fleet universe. The APAIS methods of at-sea interviews of head boat anglers includes direct observations of the discarded catch, identification of discarded fish to species by trained interviewer/observers, evaluation of discard disposition, and length measurements of discarded fish. This information is not available in the SEHB logbooks.

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

The respondents are individual recreational fishers and, by definition, are not businesses. Therefore, no small businesses will be impacted by this survey design or conduct.

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

If the survey is not conducted, NMFS will not have recreational fisheries catch information from a majority of saltwater anglers to support fishery stock assessments and management. An ongoing survey of recreational anglers is required to monitor changing conditions in the fishery and support modifications in fishery regulations both within fishing seasons and among fishing years. In addition, a continuous time series of data is scientifically essential to assess the impact of recreational fishing on fish stocks.

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 <u>Federal Register</u> Notice on what was intended to be a revision of OMB Control No. 0648-0052, with these surveys added, published on March 9, 2012 (77 FR 14348) solicited public comment on this revision. No comments were received.

MRIP is a collaborative effort among government agencies, independent scientists, recreational fishing groups and conservation organizations to ensure scientifically rigorous collection of appropriate information that meets manager and stakeholder needs. Subsequently, NMFS staff maintains regular communication with customers, through workshops, workgroup meetings and one-on-one consultations, to ensure that needs for recreational fishing statistics are being met. For example, MRIP hosted a workshop in March 2011 with data customers to discuss data collection alternatives and tradeoffs among alternatives for increasing the timeliness of recreational fishing catch and effort estimates. Outcomes of the workshop are summarized in a final workshop report:

https://www.st.nmfs.noaa.gov/mdms/doc/32Recreational_Data_Timeliness_FINAL_Report.pdf

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

This data collection will not include any incentives to prospective respondents.

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

As stated on the instruments, responses are kept confidential as required by section 402(b) of the Magnuson-Stevens and NOAA Administrative Order 216-100, Confidentiality of Fisheries Statistics, and will not be released for public use except in aggregate statistical form without identification as to its source. Section 402(b) stipulates that data required to be submitted under an FMP shall be confidential and shall not be released except to Federal employees and Council staff responsible for FMP monitoring and development or when required under court order. Data such as personal addresses and phone numbers will remain confidential.

11. <u>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.</u>

No sensitive questions are asked.

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

The Access-Point Angler Intercept Survey will be completed by approximately 102,000 respondents resulting in a total estimated burden of 7,650 hours (102,000*4.5 minutes/60 minutes = 7,650). The expected number of respondents is based on the results of previous MRFSS angler intercept surveys in the regions the MRIP APAIS is to be conducted (Maine – Louisiana, Puerto Rico, Hawaii). An hourly rate of \$22.77 is based on the average for all civilian workers from the January 2011 National Compensation Survey (http://www.bls.gov/ncs/ocs/sp/nctb1477.pdf). A total of 7,650 burden hours are anticipated, resulting in a labor costs to respondents of approximately \$174,191. **Annualized responses:** 34,000, hours: 2,550 and labor costs: \$158,064.

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).

This data collection survey will incur no cost burden on respondents beyond the costs of response time.

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

Annual cost to the Federal government is approximately \$2,800,000: \$2,500,000 in data collection costs and \$300,000 in professional staff, overhead and computing costs.

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

This is a new program.

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

Each year, NMFS administers recreational fishing surveys for six discrete, two-month reference waves, beginning with wave 1 (January/February) and continuing through wave 6 (November/December). The MRIP APAIS will be administered for six successive waves per year, for 3 years, beginning with wave 1 (January/February), 2013 and continuing through wave 6, 2015.

All data collected and analyzed will be included in table format available on the Web page of the Fisheries Statistics Division, Office of Science and Technology, National Marine Fisheries Service. The Web site address is http://www.st.nmfs.gov/st1/recreational. Data from this survey may support research and analyses to be presented at appropriate professional meetings (e.g. American Fisheries Society, Joint Statistical Meetings) and may be submitted for publication in appropriate statistical or fisheries peer-reviewed journals. Summary marine recreational fishery catch statistics produced using data from this survey are included in the annual publication by NMFS, Fisheries of the United States (e.g. FUS 2010).

17. <u>If seeking approval to not display the expiration date for OMB approval of the information collection</u>, explain the reasons why display would be inappropriate.

Not Applicable.

18. Explain each exception to the certification statement.

Not Applicable.

References

Fisheries of the United States, 2010 (2011) U.S. Department of Commerce, NOAA, National Marine Fisheries Service, Office of Science and Technology, USGPO, August 2011, http://www.st.nmfs.noaa.gov/st1/fus/fus10/index.html

National Research Council (2006). *Review of Recreational Fisheries Survey Methods*. Washington, D.C.: National Academies Press.