

SUPPORTING STATEMENT
MARINE RECREATIONAL FISHERY STATISTICS SURVEY
OMB CONTROL NO. 0648-0052

A. JUSTIFICATION

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

This request is for a revision of this information collection.

Collection of these data is necessary to fulfill statutory requirements of Section 303 of the [Magnuson-Stevens Fishery Conservation and Management Act](#) (MSFCMA) (16 U.S.C. 1853 et. seq.) and to comply with [Executive Order 12962 on Recreational Fisheries](#). Section 303 (a) of the Magnuson-Stevens Act (MSA) 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.

This revision will fulfill statutory requirements of Section 401 of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act. Section 401 (g) requires that the Secretary of Commerce, “establish a program to improve the quality and accuracy of information generated by the Marine Recreational Fishery Statistics Survey”. MSA further specifies that future surveys should, “target anglers registered or licensed at the State or Federal level to collect participation and effort data”, and that the program, “to the maximum extent feasible implement the recommendations of the National Research Council (NRC)” that were provided in a 2006 review of the methods currently used by National Oceanic and Atmospheric Administration (NOAA) Fisheries to survey marine recreational fishing effort and catch.

The NRC Review suggested that recreational fishing surveys suffer from inefficiency, potential bias due to under-coverage of angling populations, and potential bias due to non-response (NRC, 2006). NOAA Fisheries is addressing these concerns by developing and implementing the Marine Recreational Information Program (MRIP), an improved system of surveys that will replace existing marine recreational fishing data collection programs. One of the primary objectives of MRIP is to assess potential sources of bias in ongoing data collection methods.

The NRC identified potential problems with onsite surveys of recreational anglers, which collect catch information at the conclusion of recreational fishing trips. Generally, catch surveys are interviewer- administered surveys conducted at publicly accessible fishing sites such as public piers, beaches, marinas and boat ramps. Because the coverage of onsite surveys is limited to public-access sites, estimates of total catch rely on assumptions about the behavior and success of anglers who access the water from private-access sites such as private residences, community beaches, marinas and docks, and private yacht clubs. Specifically, current sampling and estimation approaches assume that anglers who are not accessible to interviewers (private-access) exhibit similar behavior and have similar success as anglers who are accessible to interviewers (public-access). The NRC criticized the fact that this assumption has not been tested. This requested revision will test the assumption that private-access anglers’ behavior and

success are the same as that of public-access anglers by collecting catch data and angler behavior data through an offsite longitudinal panel survey.

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.

Recreational fishing catch and effort data are used annually by National Marine Fisheries Services (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 stock of fish. 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. Information collected through this study will be used to identify and quantify bias in ongoing recreational fishing survey methods, as well as test the feasibility of panel designs for collecting recreational fishing catch and effort data. The results of the study will be used to develop more efficient and accurate surveys of recreational anglers.

The final survey instruments for this data collection will be developed through pretesting (focus groups and/or cognitive interviewing) with fewer than ten individuals. The questionnaire will be designed to collect the data elements currently collected through the Coastal Household Telephone Survey (CHTS), Angler License Directory Survey (ALDS), and Marine Recreational Fisheries Statistics Survey (MRFSS) Intercept Survey, all currently approved information collections under OMB Control No. 0648-0052. Specific data elements that will be collected include:

Recent Background

In a previous revision to OMB Control No. 0648-0052 (2009), we requested approval from Office of Management and Budget (OMB) to conduct a mail survey to collect both fishing effort and catch data (“mail survey of fishing effort and angler diary” in ROCIS). The survey would utilize a dual-frame design by sampling from databases of saltwater licensees (frame of individuals) and a frame of residential addresses (household frame). In addition, the survey would be a two-stage design; the first stage would “screen” the license frame and residential address frame to identify active anglers (fished during the previous year) and also collect detailed information about fishing trips that occurred during the previous 2 months. The second stage would collect information about catch. The two-stage design was proposed as a means of increasing efficiency. Specifically, it would be extremely inefficient (and costly) to send a relatively lengthy catch questionnaire to a sample of residential addresses, the vast majority of which do not include people who fish. The two-stage approach provided an opportunity to collect fishing effort data, as well as identify a “panel” of anglers from whom we could collect catch data.

One of the goals of the study was to determine the feasibility of using a mail survey to collect recreational fishing data. Ultimately, we decided that the sample sizes that would be needed for the first stage of sampling to collect statistically meaningful catch data in the second stage would be prohibitively large for a feasibility study. As a result, we modified our request to use the screener questionnaire only for the residential address frame, and we requested to add a new questionnaire to collect detailed effort data ("mail survey of fishing effort" in ROCIS). The new questionnaire would be used as the second stage questionnaire for the address frame and would be used as a single-stage questionnaire for the license frame (e.g. for the address frame, the screener questionnaire was used to identify anglers and the main questionnaire was used to collect detailed fishing effort from those anglers). We determined that it was unnecessary to use a screener questionnaire for the license frame since individuals who purchased a license were much more likely to have fished. Both screener questionnaire and "main questionnaire" were approved by OMB. We also received approval to conduct the "panel study" ("angler diary") to collect catch data but did not implement a final questionnaire.

Because the mail survey proved to be feasible, we wish to maintain the approved burden hours for both the screener questionnaire and the main questionnaire. We also wish to conduct a follow-up survey to test the feasibility of a panel study for collecting catch data. The panel study will also utilize a dual-frame (residential address and license frame), two-stage approach. The screener questionnaire will be similar to the approved screener questionnaire. However, it will be administered to both an address sample and a license sample, and it will be modified to include questions about fishing avidity (how often respondents fish) as well to ask if respondents would be willing to participate in the panel study (i.e. it will be modified to recruit anglers into the panel study). The benefits of sampling anglers through time in the panel study are two-fold; 1) it will increase the amount of catch data we collect, which will allow us to minimize the size of the screening sample, and 2) it will allow us to observe changes in fishing behavior through time.

Screener questionnaire

This information will be collected:

- a) Composition of household.
- b) Participation in recreational saltwater fishing as well as other recreational activities (the later added to reduce avidity response bias) for household members. This information will be used to identify potential panelists.
- c) Contact information for follow-up, including cell phone and landline usage and internet access information. Having accurate, preferred contact information is necessary for conduct of the panel.

Monthly panel questionnaire

This information will be collected for one year:

- a) Total number of recreational fishing trips, number taken on privately owned boats, and number of shore fishing trips taken each month will be used to estimate fishing effort.

- b) Characteristics of each fishing trip taken during the month, including the time that each trip began and ended, and whether trips concluded at publicly accessible location, will be used to estimate under-coverage of onsite surveys. For example, fishing trips that concluded during the night or at private-access sites are not likely to be included in the onsite sample frames.
- c) The state, county and specific port where each trip concluded are used to assess fishing effort and assess the accuracy of sampling weights for onsite sample frames.
- d) The type of water body fished (e.g. inland, ocean) and distance from shore are used to estimate fishing effort by principal management area (e.g. state versus Federal jurisdictions).
- e) Amount of time spent fishing is used to estimate fishing effort in hours. This provides an estimate of fishing effort that is more comparable to commercial fishery statistics.
- f) Targeted species is used to estimate fishing effort directed at particular species. When combined with catch information, directed fishing effort is used to assess the abundance of the species.
- g) Identification of species and number caught and released is used to estimate the number of fish landed and released by species. This information is used to track landings for management purposes, as well as estimate the abundance of fishery stocks.

At a minimum, panelists will be asked to report details about fishing activities at monthly intervals. More avid anglers (based on screening interview) will be contacted bi-weekly. To insure the highest quality data, participants will be asked to record trip information as soon as possible following the completion of a fishing trip. Those assigned to the computer assisted telephone interview will be asked to record some basic information about the trip in a paper diary, to aid in their recall during the monthly telephone interview. Those assigned to the web-based data collection will be encouraged to access the online reporting site shortly after they fish. As a result, response activity will be a function of fishing activity. Previous studies (e.g., Pollock, et al, 1994;) clearly indicate that survey respondents' ability to recall detailed information decays rapidly as the gap between the measured behavior and reporting increases, even for periods as short as two months. The success of the study is contingent upon panelists' ability to accurately recall specific details about past fishing trips. Increasing the reference period beyond one month will increase the likelihood of reporting error. In addition, the approach being proposed has been successfully implemented in a study of anglers in Australia (Henry and Lyle, 2003) with high response rates and no indications of complaints concerning respondent burden.

There are no changes to any of the other information collections under this OMB Control Number (CHTS, ALDS and MRFSS).

As explained in the preceding paragraphs, the information gathered has utility. 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. Although the information collected is not expected to be disseminated directly to the public, results will be used in scientific, management, technical or

general information publications. Should NOAA Fisheries decide to disseminate the information, it will be subject to the quality control measures and 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.

One of the goals of this study is to test the feasibility of online reporting of recreational fishing data. To that end, the survey will utilize a split-sample design in which half of the panelists will report fishing activity through computer assisted telephone interviews, and half will report through an online questionnaire. Web panelists who do not submit data through the online form on schedule will be contacted via telephone and asked to provide data either through the online form or through a telephone interview.

4. Describe efforts to identify duplication.

Panelists will be recruited through a screening survey that will sample from lists of licensed anglers, as well as comprehensive lists of residential addresses. Sample frames for ongoing recreational fishing telephone surveys that use these sample frames will be screened to remove anglers who are participating in the panel study.

The panel study will collect similar information to the ongoing MRFSS Access-Point Intercept Survey (APIS). As described above, the APIS does not cover fishing trips that conclude at non-publicly accessible fishing access sites. This survey will test for bias resulting from under-coverage of APIS sample frames.

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

No small businesses will be impacted by this revision.

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

Information collected through this study will be used to develop improved surveys of recreational anglers as mandated by Section 401 of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act. Failure to implement the data collection will delay the Agencies' effort to develop and implement the Marine Recreational Information Program.

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

NA.

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 April 23, 2010 (75 FR 21231) solicited public comment on this revision. No comments were received.

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

The screening interview to recruit panelists will include a \$1.00 cash incentive. The benefits of cash incentives on mail survey response rates are well documented (e.g., Church, 1993). A small token of appreciation (e.g., magnet, fishing related information) will be provided to respondents who participate for the full year in the panel survey.

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

As stated on the survey 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. 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 sensitive questions are asked.

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

The revised total burden for the MRFSS will be 49,640 hours, a net increase of 2,147 over the current hours of 47,493. The screener questionnaire will be completed by approximately 5,040 respondents (5,040 x 8 minutes/60 minutes = 672 hours). Of these, approximately 1,260 will participate in the panel survey (1,260 x 12 months x 10 minutes / 60 minutes = 2,520 hours₂).

Total burden attributable to this specific information collection will be approximately 3,192 hours, determined as follows:

Activity	# Respondents	Responses	Minutes/activity	Total Hours
Screening Questionnaire	5,040	5,040	8	672
Angler Diary ²	1,260	15,120	10	2,520 ₁
Totals	5,040	20,160		3,192

¹ Elimination of a previously approved panel study results in a decrease of 1,045 hours.

² Respondents to the angler diary survey are a subset of the respondents to the effort questionnaire and do not represent new respondents.

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).

These data collections 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 \$300,000 including data collection and statistical consulting services costs.

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

The net increase of 2,147 hours is the result of the following program changes:

- 1) Elimination of a previously-approved panel study resulted in a reduction of 1,045 hours.
- 2) Implementation of a screening survey to identify eligible respondents and recruit panelists resulted in an increase of 672 hours.
- 3) Implementation of a monthly panel study resulted in an increase of 2,520 hours.

There are no changes to any of the other information collections under this OMB Control Number.

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

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 address is <http://www.st.nmfs.gov/st1/recreational>. Additional summaries of data will be included in the annual publication "Fisheries of the United States." Findings from the study will be presented at both appropriate professional meetings (e.g., American Statistical Association; American Fisheries Society) and will be submitted for publication in an appropriate statistical or fisheries peer-reviewed journal.

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.

NA.

18. Explain each exception to the certification statement.

There are no exceptions.