

**SUPPORTING STATEMENT
MARINE RECREATIONAL INFORMATION PROGRAM (MRIP) FISHING EFFORT
SURVEY
OMB CONTROL NO. 0648-0652**

A. JUSTIFICATION

This request is for revision and extension of a currently approved collection, to continue to implement the MRIP Fishing Effort Survey (MFES) in Puerto Rico, Hawaii, and all states along the Atlantic and Gulf Coasts. The non-resident survey is now covered under OMB Control No. 0648-0659, as is the 2016 validation follow-up study.

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.

The MRIP Fishing Effort Survey (FES) is a single-phase mail survey that utilizes a screening dual-frame design with screening occurring prior to data collection (Lohr, 2009). Specifically, an ABS sample within a coastal state is matched to that state's angler license database to identify addresses with (matched) and without (unmatched) licensed anglers. In this application, the license information is used to screen and stratify the ABS sample into strata that can be sampled at different rates. For example, the matched stratum, which is expected to be more productive in terms of identifying anglers, can be sampled at a higher rate than the unmatched strata. This type of stratification improves the efficiency of data collection and maintains the coverage of the ABS frame.

This request is to continue to implement the FES in all states along the Atlantic and Gulf Coasts. The FES will be conducted for five, two-month reference waves (March/April – November/December) in the states along the Atlantic Coast, with the exception of North Carolina and Florida. In North Carolina and the Gulf States (including both coasts of Florida) the FES will be conducted for six reference waves (January/February – November/December). These specific reference periods encompass the majority of annual recreational saltwater fishing activity within the study area. Prior surveys indicated recreational fishing outside these periods was uncommon, contributed a very small percentage of annual fishing effort and fishery landings, and would be disproportionately expensive to sample. This information collection 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 [NRC]”.

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 FES estimates marine recreational fishing effort for two-month reference waves. Recreational fishing catch and effort data 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 catch and effort are required for the development of regional management policies and plans.

The FES utilizes the Weather and Outdoor Activity Survey instrument, which collects both fishing and non-fishing information. Testing of the FES design suggested that this instrument resulted in more representative samples of the general population than a fishing-specific instrument. Specific data elements that will be collected in the questionnaire include:

- a) Questions about weather and visitation to coastal areas are included to engage non-anglers,
- b) Total number of household residents,
- c) Type of household telephone service is used to assess gains in coverage over random digit dial telephone surveys and compare FES samples to other national population surveys,
- d) The type of household unit (rented or owned) is used to assess the representativeness of survey samples and can be used for nonresponse weighting adjustment and/or post-stratification,
- e) Demographic information of household residents, including gender, age and ethnicity is used to assess the representativeness of survey samples and can be used for nonresponse weighting adjustment and/or post-stratification of estimates,
- f) Questions about fishing activity in the past 12 months and 2 months are used to screen for recent fishing activity, assist with recall, and estimate the number of private boat and shore trips during the different reference periods.

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 MFES 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.

The surveys will be conducted by mail. Survey responses for mail surveys will be automatically captured through optical character recognition (OCR), which will greatly increase the accuracy and efficiency of data collection.

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.

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. Individuals or households are the respondents.

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

If the survey was not conducted or was conducted less frequently, NMFS and state natural resource agencies would experience difficulty in effectively carrying out their responsibilities to meet statutory, administrative, and other obligations to end overfishing of marine fishery resources. 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 Federal Register Notice, published on April 28, 2016 (81 FR 25389) solicited public comment on this revision. No substantive 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, MRIP staff members maintain regular communication with customers, through workshops, workgroup meetings and one-on-one consultations. For example, The MRIP Executive Steering Committee (ESC), which includes senior managers from NOAA Fisheries, the Executive Directors of the Interstate Marine Fisheries Commissions, and a representative from the Marine Fisheries Advisory Committee, provides general oversight of MRIP and ensures that the program satisfies Federal, state and stakeholder needs for recreational fishing statistics. The ESC meets annually to review program activities, strategically allocate funds to addresses data needs and approve research priorities. The ESC most recently met in February, 2016. Similarly, the MRIP Operations Team (OT), which is responsible for developing and testing improved data collection designs, includes representatives from NOAA Fisheries headquarters, regional offices and science centers, the Interstate Marine Fisheries Commissions and state natural resource agencies. The OT meets 1-2 times each year to identify regional and state needs for recreational fishing statistics and develop research priorities. The most recent OT meeting was in October, 2015. Finally, MRIP staff participate in numerous meetings sponsored by regional fishery management councils and state natural resource agencies to update fishery managers, scientists and stakeholders on program accomplishments and collect feedback about data needs and concerns about the program. Recent feedback and questions resulting from these forums include the following

- Given the proliferation of caller ID and cellular telephone service, what is MRIP doing to address concerns about the coverage of landline telephone surveys?
- Response: The limitations of RDD telephone surveys were noted in the NRC review, and MRIP has responded by developing and testing data collection designs that sample from alternative frames and utilize alternative data collection modes.
- How did MRIP arrive at the current design for collecting recreational fishing effort data? Response: MRIP implemented a sequential series of pilot studies to develop an alternative to the CHTS. Each methodology that was tested reflected design elements, both positive and negative, from earlier studies. The present design provides complete (or nearly complete) coverage of the population of anglers, incorporates sampling from state angler license databases, as suggested by the NRC, and is less susceptible to nonresponse error than the CHTS.
- MRIP should expand the use of angler registries or license databases to collect information from anglers.

- Response: We agree completely with this comment, and have consistently tried to incorporate angler license databases into sampling designs.
- How complete are angler registries or license databases in terms of covering all recreational fishing activity?
- Response: Coverage of license databases varies by state and type of fishing activity. Previous MRIP pilot studies suggest that coverage ranges from 20%-95% in states where pilot studies have been conducted.

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

The benefits of prepaid cash incentives on improving survey response rates are well documented. Dillman (2009) describes a small, prepaid cash incentive as a “token of appreciation” that encourages response and brings attention to the survey request. In addition to improving response rates, incentives may reduce nonresponse bias by encouraging participation from individuals with little or no interest in the survey topic (Groves et al., 2006).

Church (1993) presents a meta-analysis of 38 experimental studies testing the impact of cash incentives on mail survey response rates. The incentives, which ranged from \$0.01 to \$5.00 increased response rates over control groups by an average of 19.1%.

More recently, Trussell and Lavrakas (2004) reported that providing an incentive of at least \$1.00 increased response rates and cooperation rates to the second phase of a two-phase, mixed-mode (RDD/mail diary) survey, and that incremental increases in incentive amounts up to \$10.00 increased response rates in a linear fashion. These conclusions were consistent even for individuals who initially refused to participate in the second phase of the study.

Similarly, Brick et al. (2011) concluded that a prepaid cash incentive of \$15.00 significantly increased response rates to the second phase of a national, two-phase mail survey, and that response rates for a \$5.00 incentive treatment, while not significantly different from either a control group or the \$15.00 experimental treatment, were in the expected direction. In addition, the effect of the incentives was most pronounced for the initial mailing, which could result in decreased costs for follow-up mailings.

The initial two waves of the 2012-2013 FES pilot study (OMB Control No. 0648-0652) included an experiment to test the impact of cash incentives on response rates, survey measures and cost. Three levels of incentives, \$1.00, \$2.00 and \$5.00, and a zero dollar control were tested. Incentives were included in the initial survey mailing for each wave.

Table 1 provides the response rates, total number of completed surveys and relative cost per completed survey for each incentive treatment. Response rates increased significantly with increasing incentive amounts, and differences in response rates among incentive treatments were highly significant ($p < 0.0001$). However, while the \$5.00 incentive resulted in the highest response rate, the \$1.00 and \$2.00 treatments were the most efficient in terms of cost; including a \$1.00 or \$2.00 cash incentive lowered the cost per completed survey by approximately 15%.

Given the benefits of reduced data collection costs and higher response rates, the MFES will include a \$2.00 cash incentive in the initial survey mailings. Based upon the results of previous pilot studies, we anticipate that a \$2.00 incentive will result in sufficiently high response rates and minimize overall survey costs by reducing the number of survey mailings.

Table 1. Response rates, number of completed surveys and relative data collection costs for each incentive treatment tested during the first two waves of the MFES.

Incentive Amount	Response Rate	Completed Surveys	Relative Cost per Complete ¹
\$0.00	27.0	2,154	1.00
\$1.00	37.8	3,065	0.85
\$2.00	41.8	3,415	0.87
\$5.00	46.7	3,807	1.09

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

No personally identifiable information will be collected through the survey. Responses will only be associated with a unique, randomly assigned identification code. Any public release of survey data will be without identification as to its source or in aggregate statistical form. All survey data will be stored on secured, password protected servers, and all transfer of survey data will utilize secure file transfer protocols.

¹ Data collection costs include costs associated with printing survey materials, assembling survey packets, postage, receipting and processing completed surveys, and incentives.

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 FES will be completed by approximately 110,000 respondents annually, resulting in a total estimated burden of 18,333 hours (110,000*10 minutes / 60 minutes = 18,333). The expected number of respondents is based on the results of previous FES administrations. An hourly labor rate of \$23.23 is based on the average for all civilian workers from the National Compensation Survey (http://www.bls.gov/oes/current/oes_nat.htm#00-0000). There are no other costs to respondents. There are also no recordkeeping requirements associated with MRIP Fishing Effort Survey. A total of 18,333 burden hours is anticipated, resulting in a cost to respondents of approximately \$425,875.

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. Envelopes with prepaid postage will be included in the questionnaire mailing.

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

Annual cost to the Federal government is approximately \$3,100,000: \$2,900,000 in data collection costs and \$200,000 in professional staff, overhead and computing costs.

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

This requested revision results in a net decrease of 43,200 respondents and responses and 7,237 hours.

Program Change: Previously, fishing effort for non-resident anglers (anglers who fish in a state other than the state of residence) was estimated from the Nonresident Angler Survey (NAS), a self-administered mail survey that sampled from lists of licensed non-resident anglers. Previous administration of the NAS suggested that coverage of the NAS sample frame is insufficient due to licensing exemptions and the time lag between development of the sample frame and the beginning of data collection. Non-resident fishing effort is now estimated through the independent Access-Point Angler Intercept Survey (OMB Control No. 0648-0659). Elimination of the NAS results in a decrease of 15,274 respondents and responses and 2,456 hours. Elimination of the 2016 Validation Follow-Up Study and the previously approved follow-up study (which was meant to be replaced by the 2016 study) will result in a decrease of 540 responses and 113 hours.

Adjustments: Adjusting the sample size for the existing FES to account for precision requirements and available funding results in a decrease of 27,466 respondents and responses and 4,578 hours.

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 site address is <http://www.st.nmfs.noaa.gov/recreational-fisheries/index>. 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.

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.

References

- Brick, J.M., D. Williams, and J.M. Montaquila (2011). Address-Based Sampling for Subpopulation Surveys. *Public Opinion Quarterly* 75: 409-428.
- Church, A.H. (1993). Estimating the Effect of Incentives on Mail Survey Response Rates: A Meta-Analysis. *Public Opinion Quarterly* 57:62-79.
- Dillman, D.A., J.D. Smyth, and L.M. Christian (2009). *Internet, Mail, and Mixed-Mode Surveys: The Tailored Design Method*. New York: Wiley and Sons.
- Groves, R., M. Couper, S. Presser, E. Singer, R. Tourangeau, G. Acosta, and Nelson, L. (2006). Experiments in Producing Nonresponse Bias. *Public Opinion Quarterly* 70: 720-736.
- Lohr, S. (2009). Multiple Frame Surveys. Chapter 4 in Pfeffermann, D. (Ed.) *Handbook of Statistics: Sample Surveys Design, Methods and Applications* (vol. 29A). Elsevier, Amsterdam.
- Trussell, N. and P.J. Lavrakas (2004). The influence of incremental increases in token cash incentives on mail survey response: Is there an optimal amount? *Public Opinion Quarterly* 68: 349-367.