

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

**A. JUSTIFICATION**

This request is for a revision of a currently approved collection, to implement the MRIP Fishing Effort Survey (MFES) in Puerto Rico, Hawaii, and all states along the Atlantic and Gulf Coasts, with the exception of Texas.

**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.

Currently, recreational fishing effort data (number of fishing trips) are collected through the Coastal Household Telephone Survey (CHTS), a list-assisted, random digit dial telephone survey of coastal county households (OMB Control No. 0648-0052). In recent years, the efficiency and effectiveness of RDD surveys in general, and the CHTS specifically, have been questioned due to declining rates of coverage and response. To address concerns about the CHTS, the National Marine Fisheries Service (NMFS) commissioned a review of the survey by the National Research Council (NRC) of the National Academies of Science. The NRC Review concluded that existing recreational fishing surveys suffer from inefficiency, potential bias due to under-coverage, and potential bias due to nonresponse (NRC, 2006).

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

- “Future telephone surveys should be based on a universal sampling frame”;
- “Offsite sampling methods that rely on telephone interviews are complicated by the increasing use of cell phones”;
- “The existing random digit dial (RDD) survey suffers in efficiency”;
- “The existing random digit dial (RDD) survey may allow bias in estimation from its restriction to coastal counties only”;
- “Dual-frame procedures should be used whenever possible to reduce sample bias”.

NMFS has addressed these concerns by implementing the Marine Recreational Information Program (MRIP) and developing and testing alternative survey designs. Over the past several years, under OMB Control Nos. 0648-0052 and 0648-0652, NMFS has sequentially tested several alternatives to the CHTS with a goal of replacing the CHTS with a more accurate and efficient survey of recreational fishing activity. The various designs that have been studied through MRIP pilot studies are described below. More detailed descriptions of the data

collection designs and comparisons of estimates and metrics of survey quality, such as response rates and coverage rates, are documented elsewhere (Brick et al., 2012).

### **Angler License Directory Telephone Survey**

As noted by the NRC, a more efficient approach for surveying anglers is to sample directly from a “universal sampling frame” of licensed saltwater anglers. Working collaboratively with the Gulf States Marine Fisheries Commissions, the Gulf Coast states, and the North Carolina Division of Marine Fisheries, MRIP has designed and tested Angler License Directory Telephone Surveys (ALDS), which sample from state databases of licensed anglers. The ALDS was implemented as a pilot project in Florida, Alabama, Mississippi and Louisiana in 2007 and expanded to North Carolina in 2008. Currently, the survey is being administered in LA and NC.

As predicted, the ALDS is more efficient than the CHTS at identifying anglers – in a recent reference wave, 46% of ALDS respondents reported fishing, while only 6.5% of CHTS respondents reported fishing during the same wave. However, state license databases are not comprehensive - exemptions to state licensing requirements and unlicensed fishing activity, as well as incomplete and inaccurate contact information for individuals included on the sample frames, result in gaps in the coverage of the survey. Subsequent studies (Brick et al., 2012) have suggested that undercoverage due to unlicensed fishing activity may be as high as 70% in some states for certain types of fishing activity, and that as many as 20% of frame entries may be unreachable due to “bad” (missing, nonworking, wrong number) telephone numbers. In addition, response rates for the ALDS are only marginally higher than CHTS response rates. Consequently, MRIP has explored alternative data collection designs that provide greater coverage and are less susceptible to survey error.

### **Dual-Frame Telephone Survey**

As noted above, the CHTS and the ALDS, considered individually, do not provide complete coverage of the angler population; the CHTS excludes residents of non-coastal counties and households without landline telephone service, and the ALDS excludes unlicensed anglers. To compensate for potential sources of coverage error in the CHTS and ALDS, MRIP developed an estimation design that integrates CHTS and ALDS sampling in a dual-frame design (Lai and Andrews, 2008). The union of the CHTS and ALDS sample frames defines three domains; 1) anglers who can only be sampled from the CHTS frame (unlicensed anglers who reside in coastal counties and have a landline telephone); 2) anglers who can only be sampled from the ALDS frame (licensed anglers who reside outside of the coverage area of the CHTS or reside within the coverage area of the CHTS but don’t have a landline telephone); and, 3) anglers who can be sampled from both the CHTS and ALDS frames (licensed anglers who reside in coastal counties and have a landline telephone). A fourth domain includes anglers who cannot be sampled by either the CHTS or ALDS (unlicensed anglers without landline telephones within the CHTS coverage area and unlicensed anglers residing outside the coverage area of the CHTS).

The dual-frame telephone survey design has greater coverage than either the CHTS or the ALDS independently. However, exclusions from the union of the CHTS and ALDS sample frames create a potentially significant coverage gap – for example, an estimated 38% of fishing trips in NC are taken by anglers who are not included on either the CHTS or ALDS frames (Andrews et al., 2010). In addition, partitioning anglers into the appropriate domains, and subsequently

adjusting sample weights, is based upon survey respondents' willingness and ability to classify themselves as licensed or unlicensed anglers. This is an unreliable approach for defining dual-frame domains (Andrews et al., 2010) and subsequently calculating unbiased survey weights. Finally, the dual-frame telephone survey approach is susceptible to nonresponse error due to the low response rates of the component surveys.

### **Dual-Frame Mail Survey**

An alternative to the dual-frame telephone survey is to identify and contact anglers through a dual-frame mail survey design. MRIP initially tested the feasibility of a dual-frame mail survey design in NC in 2009, and conducted a follow-up study aimed at enhancing response rates and response times in NC and LA in 2010.

The specific details of the dual-frame mail survey design are described elsewhere (Andrews et al. 2010). Briefly, anglers are sampled from both state databases of licensed saltwater anglers and residential address frames maintained and made commercially available by the United States Postal Service. To address concerns about coverage, all addresses within the study states are included in the ABS sample frame (i.e., the sample was not limited to coastal counties). Domains defined by the union of the component sample frames are determined by matching the address-based sample (ABS) to the license databases by address and/or telephone number (for the cases in which a telephone number can be located through a commercial service for the ABS sample).

Sampling from the license frame is conducted in a single phase; sampled anglers are mailed a brief questionnaire that asks respondents to report the number of days fished from the shore and from a boat during a two-month reference wave. The ABS sampling is conducted in two phases; residential addresses are sampled and mailed a screening questionnaire to identify individuals who fished during the previous twelve months, and anglers identified in the screening phase are sent a second-phase questionnaire that is identical to the license sample questionnaire.

Results of the pilot studies were encouraging; sampling from the ABS frame provides nearly complete coverage of the population (Iannacchione, 2011), and response rates to the mail surveys were considerably higher than either the ALDS or CHTS (Andrews et al., 2010, Brick et al., 2012), minimizing the potential for nonresponse error. In addition, matching the ABS sample to license frames a priori by address and/or telephone number provides a more accurate means for defining domain membership that is not susceptible to recall error or inaccurate reporting. Frame matching also provides supplemental information for assessing nonresponse error for the ABS sample, and subsequently defining nonresponse weighting adjustment cells.

The dual-frame mail survey design provides many benefits over telephone survey approaches and addresses many of the concerns identified by the NRC. However, frame matching is not 100% accurate, resulting in misclassification of domain membership for some sample units; generally frame units that could have been sampled from both frames are excluded from the overlapping domain due to a failure to match. Subsequently, dual-frame weights are not down-weighted appropriately, resulting in an overestimation of fishing effort (Brick et al., 2012). In addition, there are concerns that a mail survey design cannot satisfy customer needs for timely estimates, although comparisons between early mail survey returns and later survey returns show

little difference in terms of fishing activity, suggesting that preliminary effort estimates could be produced within the timeframe required by customers.

### **Dual-Frame, Mixed-Mode Survey**

To further address concerns about timeliness, as well as explore differences between mail and telephone data collection modes, MRIP implemented a dual-frame, mixed-mode survey. The sampling design for the survey, which tested for six reference waves in 2012, is nearly identical to the dual-frame mail survey – anglers are sampled from angler license frames and households are sampled from residential address frames. As with the dual-frame mail survey, the address-based sample (ABS) is mailed a screening questionnaire to identify anglers. The methodology differs from the dual-frame mail survey in that anglers identified through household screening, as well as anglers sampled from the state license databases, are randomly allocated into telephone and mail treatment groups – anglers in the telephone treatment group are contacted and asked to provide information about recent recreational fishing trips through a telephone interview, and anglers in the mail treatment group are mailed a questionnaire that asks about recent recreational fishing activity.

Results from the mixed-mode study demonstrate that after three weeks of data collection, response rates for the mail survey treatment equal or exceed response rates for the telephone treatment, which is fielded and completed during the first ten days following the end of the reference wave. In addition, preliminary estimates based upon early mail survey returns (mail surveys returned within three weeks after the conclusion of the reference wave) are not significantly different from final estimates, which include an additional nine weeks of data collection. This suggests that early mail survey returns can be used to produce preliminary effort estimates in a timeframe that is consistent with the current estimation schedule for the CHTS, in which estimates are available 45 days after the conclusion of each wave.

### **Single Phase, Screening Dual-Frame Design with Screening Prior to Data Collection (MRIP Fishing Effort Survey)**

In October, 2012, MRIP implemented a pilot study to test a single phase, dual-frame design in which screening for anglers is completed prior to data collection (OMB Control No. 0648-0652). The survey, which is referred to as the MFES, includes two components; 1) a resident angler survey, which estimates fishing effort by residents of coastal states, and 2) a nonresident angler survey, which estimates fishing effort by anglers who fish in a coastal state but reside in a different state. In addition a nonresponse follow-up survey was conducted to assess nonresponse bias in the MFES survey components.

The Resident Angler Survey (RAS) 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 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 is expected to improve the efficiency of data collection and maintain the coverage

of the ABS frame, two concerns identified by the NRC Review. Because the matching is only used to determine the sampling rate, matching errors will only impact the efficiency of data collection; they will not result in biased estimates.

The Nonresident Angler Survey (NAS) is a single-phase mail survey that samples directly from frames derived from state databases of licensed saltwater anglers. An address-based sampling approach would be especially inefficient for sampling nonresident anglers due to the low proportion of nonresident anglers among the general population.

The MFES is being tested in four states, Massachusetts, New York, North Carolina and Florida for eight, two-month reference waves, beginning with the September/October wave (wave 5) of 2012 and continuing through the November/December wave (wave 6) of 2013. The data collection design, which included testing of two versions of the questionnaire and multiple levels of prepaid cash incentives, is being evaluated in terms of response rates, nonresponse error, representation of the residential population within the sample, and cost.

Through three complete waves of data collection, overall RAS response rates were 38.4%. Response rates ranged from 27.0% to 46.7%, depending upon the level of prepaid cash incentive included in the initial survey mailing (additional information from the incentive experiment are provided in section 9). RAS response rates for all incentive treatments, including the non-incentive control, exceeded those of the CHTS, which were approximately 16% for the same time period. Overall response rates for the NAS, which samples directly from lists of licensed anglers, were 55.7%, with a range of 43%-61%, depending upon the level of incentive. Comparisons of survey measures between MFES respondents and those who responded to the nonresponse follow-up study revealed no significant differences, suggesting that nonresponse error is minimal.

Augmenting ABS samples with license information and sampling matched and unmatched households at different rates provides an effective mechanism for sampling saltwater anglers. Overall, the MFES data collection design is considerably more efficient than a simple random sample of the same population<sup>1</sup>. Considering gains in efficiency, coverage and response over the CHTS, the MFES will result in improved estimates of recreational fishing effort.

*This request is to implement the MFES in Puerto Rico, Hawaii, and all states along the Atlantic and Gulf Coasts, with the exception of Texas<sup>2</sup>. The MFES 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, the Gulf States (including both coasts of Florida), Hawaii, and Puerto Rico the MFES 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*

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<sup>1</sup> The overall design effect for the MFES through three waves of data collection is 0.72.

<sup>2</sup> Recreational saltwater fishing activity in TX is monitored independently by the TX Parks and Wildlife Department.

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 MFES 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 Resident Angler Survey and Nonresident Angler Survey use the same instrument. Testing of different instruments for the MFES during the first two waves of this information collection demonstrated that a general instrument, the Weather and Outdoor Activity Survey that collects both fishing and non-fishing information resulted in more representative samples of the general population than a fishing-specific instrument, the MRIP Recreational Fishing Survey. Subsequently, the MFES will utilize the Weather and Outdoor Activity Survey 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 the CHTS and compare MFES samples to other national population surveys,
- d) The type of household unit (rented or owned) is used for nonresponse weighting adjustment and/or post-stratification,
- e) Demographic information of household residents, including gender, age and ethnicity is used for nonresponse weighting adjustment and/or post-stratification of estimates,
- f) Questions about fishing activity in the past 12 months, 8 months, 4 months and 2 months are used to screen for recent fishing activity, assist with recall, and estimate the number of private and 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.

The MRIP Fishing Effort Survey will replace the Coastal Household Telephone Survey (OMB Control No. 0648-0052), which is a random-digit-dial survey that collects similar information.

**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 is not conducted, NMFS will continue to rely upon the Coastal Household Telephone Survey (CHTS) to estimate recreational fishing effort. The CHTS has been criticized for its lack of efficiency and susceptibility to bias resulting from nonresponse and undercoverage. If the survey were 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 4, 2013 (78 FR 20296) solicited public comment on this revision. One substantive comment was received from the Ocean Conservancy. The commenter was very supportive of the proposed information collection and provided the following recommendations:

- (a) The proposed collection of information is essential to the proper performance of agency functions and integral to increased understanding of angler attitudes and preferences.
- (b) The proposed survey instrument is sufficiently concise and should allow for respondents to complete the survey in the estimated time.
- (c) NMFS should consider adding questions relating to angler effort from private access points, such as private docks and marinas.
- (d) Efficiency and reduction of costs could be achieved if the survey were electronic.

Regarding recommendation C, the current instrument was designed to be concise and collect the minimum amount of information necessary to estimate recreational fishing effort. We recognize the value of additional information and will consider mechanisms for collecting this type of information once the base data collection design has been established.

Regarding recommendation D, we recognize the perceived benefits of electronic data collection. However, alternative data collection modes must be carefully evaluated through controlled experiments to understand the impacts on survey response and survey measures. We will consider alternative data collection modes after the base data collection design has been established.

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. 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. 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.

The MFES has been tested broadly in previous MRIP pilot studies (including the current approval for 0648-0652), and the instrument has been evaluated through cognitive testing to ensure that the instructions and questions are clear.

**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 MFES (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 <sup>3</sup>
\$0.00	27.0	2,154	1.00
\$1.00	37.8	3,065	0.85

<sup>3</sup> Data collection costs include costs associated with printing survey materials, assembling survey packets, postage, receipting and processing completed surveys, and incentives.

\$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.**

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. 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 estimated response burden per survey activity and the total response burden are shown in Table 2. The expected number of respondents and number of responses are based on the results of previous MRIP pilot studies, including the current testing of the MFES in MA, NY, NC and FL. The 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>). There are no other costs to respondents. There are also no recordkeeping requirements associated with MRIP Fishing Effort Survey. A total of 25,500 burden hours is anticipated, resulting in a cost to respondents of approximately \$580,635.

**Table 2. Estimated response burden for the MRIP Fishing Effort Survey**

Activity	Sample Size	Expected Response Rate	Estimated Number of Respondents	Estimated Number of Responses	Minutes per Response	Total Time (Hours)
Study Total	354,265		153,000	153,000	10	25,500
Resident Angler Survey	329,192	42 <sup>4</sup> %	137,700	137,700	10	22,950
Nonresident Angler Survey	25,073	61 <sup>5</sup> %	15,300	15,300	10	2,550

<sup>4</sup> Response rate rounded up from 41.82969

<sup>5</sup> Response rate rounded up from 61.022

**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 \$3,700,000: \$3,500,000 in data collection costs and \$200,000 in professional staff, overhead and computing costs.

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

The Magnuson-Stevens Fishery Conservation and Management Act mandates that NOAA Fisheries implement an improved data collection program to monitor marine recreational fishing catch and effort. Several pilot studies testing new data collection designs have been successfully completed. This revision is requested to implement, coast-wide, a new methodology for collecting recreational fishing effort data. The proposed design is more efficient and is less susceptible to sources of non-sampling error than the current data collection approach, the Coastal Household Telephone Survey (0648-0052). Results of this data collection effort will be used to calculate bi-monthly estimates of marine recreational fishing participation and effort.

**This requested revision results in a net increase of 99,600 respondents and responses and 16,600 hours.**

**Program Change:** Expanding the MFES to 15 additional states results in an **increase of 120,000 respondents and responses and 20,000 hours.**

**Adjustments:** Adjusting the sample size for the existing MFES states, MA, NY, NC and FL to account for precision requirements and available funding results in a decrease of 19,800 respondents and responses and 3,300 hours. Eliminating the nonresponse follow-up study, which will be completed in 2013, results in a decrease of 600 respondents and responses and 100 hours. **Total adjustments: 24,000 fewer responses and 3,400 fewer 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 (e.g. FUS 2010).

**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

- Andrews, W.R., J.M. Brick, N.M. Mathiowetz, and L. Stokes (2010). Pilot Test of a Dual Frame Two-Phase Mail Survey of Anglers in North Carolina. Retrieved from [http://www.countmyfish.noaa.gov/projects/downloads/Final\\_Report%20NC%202009%20Dual%20Frame%20Two%20Phase%20Experiment.pdf](http://www.countmyfish.noaa.gov/projects/downloads/Final_Report%20NC%202009%20Dual%20Frame%20Two%20Phase%20Experiment.pdf).
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