

Supporting Statement B for Paperwork Reduction Act Submission

OMB Control Number 1018-0088

National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (FHWAR)

- 1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.**

An estimated 87,500,000 people 16 years old and older participated in fishing, hunting, and wildlife watching in the United States in 2006. Thirty-four million were sportspersons, of which 30 million fished and 12.5 million hunted. Seventy-one million were wildlife watchers who fed, observed, and photographed wildlife. The Census Bureau has designed and plans to conduct a survey of a sample of potential sportspersons and wildlife watchers to update the FHWAR in 2011. The survey content and methodology will be similar to that used for the previous three surveys.

The screening sample for the 2011 FHWAR will include approximately 55,000 housing units. It will consist of addresses selected from the July 2010 MAF (Master Address File). The MAF coverage includes all 50 States and the District of Columbia. Five States will contribute additional funds to increase the sample for their State in an effort to improve overall data reliability and to improve their State-level statistics.

The FHWAR initial interviews for households where a telephone number was obtained through research will be attempted by the field representatives working out of the Census Bureau's three telephone centers. Cases where no telephone number was found will be put on administrative hold at the telephone centers for possible completion if we receive an incoming call by a household respondent based on our advance letter. After 2 weeks, cases with no telephone number for which an interview has not begun will be recycled and followed up by field representatives through personal visits working out of the Census Bureau's 12 regional areas. Using computer assisted technology, Census Bureau field representatives will ask questions on participation in fishing, hunting, and wildlife-watching activities of the U.S. civilian noninstitutional population age 16 years and older and military personnel not residing in barracks. Paper questionnaires are not used because of the size of the questionnaire and the complexity of the skip patterns.

Two independent detail samples will be chosen from the FHWAR screening sample. They will consist of sportspersons and wildlife watchers. The Census Bureau will select the detail samples based on information reported during the screening phase. Every person 16 years of age and older in the screening sample will be assigned to a sportsperson stratum based on time

devoted to hunting or fishing in the past and time expected to be devoted to hunting or fishing in the future. The three sportspersons categories are:

- (a) Active - a person who participated in hunting or fishing in 2010 or 2011 OR intends to participate in 2011.
- (b) Inactive - a person who did not participate in hunting or fishing in 2010 AND does not intend to participate in 2011.
- (c) Nonparticipant - a person who has not participated in hunting or fishing since 2006 AND does not intend to participate in 2011.

The active and inactive groups will be eligible for interviews in the sportsperson detail sample. Every person in the FHWAR screening sample also will be assigned to one of the following two wildlife-watching categories:

- (a) Active - a person who participated in a wildlife-watching activity in 2010 or 2011 OR intends to participate in 2011.
- (b) Nonparticipant - a person who did not participate in a wildlife-watching activity in 2010 or 2011 AND does not intend to participate in 2011.

Only the active group will be eligible for interviews in the wildlife-watching detail sample. The following table shows the expected 2011 FHWAR response rates for the screening and detail samples:

	<u>2011 FHWAR Expected Response Rates</u>		
	Screeners FH-2 (households)	Sportspersons FH-3 (persons)	Wildlife Watchers FH-4 (persons)
Total Assigned Cases	55,000	19,000	10,000
B&C Noninterviews	6,500	330	160
Total Eligible Cases	48,500	18,670	9,840
Type A Noninterviews			
- Number	4,850	4,370	2,165
- Percent	10%	23%	22%
Interviews			
- Number	43,650	14,300	7,675
- Percent	90%	77%	78%

Note: The definitions and calculations are the standard ones used for the Census Bureau surveys:

- Type A Noninterviews: No one home; temporarily absent; or refused.
- Type B Noninterviews: Temporarily occupied by persons with usual residence elsewhere; vacant; converted to temporary business or storage; merged (units combined into one); unoccupied tent site or trailer site; or unfit or to be demolished.
- Type C Noninterview: Demolished; converted to permanent business or storage; house or trailer moved; condemned and unoccupied unit.

Type B and C noninterviews are excluded from the response rate calculation.

The response rate is calculated as follows: Response rate = Interviews/(Interviews + Type A noninterviews)

The active sportsperson stratum comprises those who hunted or fished in 2010 or 2011 and those who did not participate in 2010 or 2011, but plan to in 2011. Sportspersons who had hunted or fished in 2010, but not in 2011, will be stratified into two substrata based on expenditures on hunting or fishing and the number of days of participation in hunting or fishing. The two substrata are:

- (a) Avid - a person who hunted at least 30 days or fished at least 30 days OR spent more than \$600 on hunting or on fishing in 2010.
- (b) Nonavid - a person who hunted or fished at least one day but not more than 29 days AND did not spend more than \$600 on either fishing or hunting in 2010.

In wave 1, we interview all sportspersons who have participated in fishing/hunting in 2011. Those people that have not participated so far in 2011, but that MAY participate in hunting/fishing in 2011, are eligible for a wave 2/wave 3 interview. We subsample from the people identified in the screener interview as eligible to determine the sample for waves 2 and 3. The expected sample size for the sportsperson detail interview (for all waves) is 19,000.

Only the active group will be eligible for interviews in the detail wildlife-watchers sample. The Census Bureau will stratify the wildlife watchers who participated in 2010, but not in 2011 into two categories based on the distance traveled by the individual to participate in the wildlife-watching activity:

- (a) Primary Nonresidential - a person who took a trip of 1 mile or more to participate in a wildlife-watching activity.
- (b) Primary Residential - a person who participated in a wildlife-watching activity only within 1 mile from home.

The first stratum, primary nonresidential, will be further classified into two substrata based on the expenditures on the wildlife-watching activity and the number of days of participation in the wildlife-watching activity:

- (a) Avid - a person who participated at least 30 days OR spent at least \$300 on wildlife-watching activities in 2010.
- (b) Nonavid - a person who participated between 1 and 29 days AND spent less than \$300 on wildlife-watching activities in 2010.

The expected sample size for the wildlife-watching detail sample is 10,000.

The 2006 FHWAR interview response rate for the screening sample of households was 90 percent; 77 percent for the sportspersons detailed sample; and 78 percent for the wildlife-watcher detailed sample.

2. Describe the procedures for the collection of information including:

- * **Statistical methodology for stratification and sample selection,**
- * **Estimation procedure,**
- * **Degree of accuracy needed for the purpose described in the justification,**
- * **Unusual problems requiring specialized sampling procedures, and**

- * **Any use of periodic (less frequent than annual) data collection cycles to reduce burden.**

Data for the FHWAR sportsperson sample and wildlife-watching sample will be collected in three waves. The first wave will be conducted in April-June 2011; the second in September-October 2011; and the third, in January-March 2012. In the sportsperson sample, all persons who hunted or fished in 2011 by the time of the screening interview will be interviewed in the first wave. The remaining sportsperson sample will be interviewed in the second wave. Interviews for all sample persons (both first and second waves) will be attempted in the third wave.

The reference period will be the preceding 4 months for wave 1 and the preceding 8 months for wave 2. In wave 3, the reference period will be either 4 or 8 months depending on when the sample person was first interviewed. If no previous interview was conducted, the reference period will cover the entire 2011-year. After the wave 3 interviews, the Census Bureau will have collected data on each sample person's activities for the entire year of 2011.

The estimation procedure for the FHWAR screening and detail samples follows the usual statistical principles used for other surveys. The final weight for each case in the screening sample is the product of the inverse of the selection probability, a weight adjustment to account for noninterviews, a first-stage weighting factor to reduce the variance due to the selection of nonself-representing primary sampling units (PSUs), and a second stage weighting factor to bring sample estimates into agreement with independent population controls by age, sex, and race.

The final weight for each case in the FHWAR detail samples is the product of the inverse of the selection probability, a weighting adjustment to account for noninterviews, and a ratio adjustment to bring the estimates of persons age 16 or older from the detail interviews into agreement with the same estimates from the screening sample, which was a much larger sample.

The Census Bureau estimates that the overall degree of accuracy of their collection methods will meet the Fish and Wildlife Service objective that the coefficient of variation on the estimated number of sportsmen age 16 and older within a given State (excluding the District of Columbia and Hawaii) from the FHWAR sample should be approximately 12 percent.

There are no unusual problems requiring specialized sampling. The data for this survey is collected approximately every 5 years to reduce respondent burden.

3. Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.

The Census Bureau Field Division staff will perform standard procedures to keep the non-interview rate at the lowest possible level. Staff at the telephone centers will conduct research in an effort to find working telephone numbers for all selected cases. Interviewers will make multiple call attempts at various times of the day in an effort to reach every household in sample. The Census Bureau will attempt personal visit interviews for approximately 5,000 of the cases where phone numbers are not available.

In addition, the Census Bureau will follow respondents who move. Since respondents are interviewed up to three times to obtain a full year's data, new respondents cannot be substituted into the sample. Therefore, instead of losing sample persons, the Census Bureau will interview the respondents at their new phone number or residence to finish the interview. (The exception is if the respondent moves more than 50 miles outside of any sample area and a telephone number is not available.)

The estimation procedure includes a noninterview adjustment to adjust for those cases that the field staff cannot interview.

- 4. Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of tests may be submitted for approval separately or in combination with the main collection of information.**

The Census Bureau is not introducing new procedures or methods with this collection. All questions in the 2011 FHWAR have been fielded in a previous version of the survey, with the exception of one. Four other questions were changed slightly or the answer categories were modified slightly. In order to comply with the Census Bureau's pretesting policy, the Census Bureau's Systems Research Division was asked to provide an expert review of these questions.

- 5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.**

You may consult the following Census Bureau individuals for information regarding sample design and data collection:

<u>Sample Design:</u>	David Hornick	301-763-4183
	Thomas Moore	301-763-5997
<u>Data Collection:</u>	Denise Pepe	301-763-3785
	Deborah Kinnaman	301-763-3817