The Supporting Statement for OMB 0596-0208

Trends in Use and Users in the Boundary Waters Canoe Area Wilderness, Minnesota
2011

NOTE: This request is for extension of OMB 0596-0208 for an additional two years to complete a small subset of the original survey questions. The data will be used to sample and monitor use patterns as input to quota system evaluation model for the Boundary Waters Canoe Area Wilderness.

A. Justification

1. **Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.**

   Laws, Regulations, and Statutes

   - The Wilderness Act, Public Law 88-577

   The Forest Service is requesting a two year extension to collect visitor use data from the Boundary Waters Canoe Area Wilderness in Minnesota. The analysis of the data collection will be published to inform the public how visits have changed because of changing policies; natural disturbances; and national, regional, and local societal changes in the early 21st century. Wilderness managers will use the data collection to adapt current programs to changing societal interests and needs. The data will also be used to update trend information used in simulation models to decide the number of permits allocated for each access point to not exceed established limits on social conditions within the wilderness.

   The authority to collect this information comes from The Wilderness Act, Public Law 88-577. The Wilderness Act directs wilderness be managed to preserve natural conditions and to provide outstanding opportunities for solitude or a primitive and unconfined type of recreation. As outlined in the “established statement of policy” of the Act, the National Wilderness Preservation System is to administer wilderness for the use and enjoyment of the American people in such manner as will leave these areas unimpaired for future use and enjoyment as wilderness. This collection of data is in line with the Act’s encouragement to gather and disseminate information concerning visitor experiences in wilderness areas.

   Data collection will be under the responsibility of the Aldo Leopold Wilderness Research Institute (ALWRI). Established in 1993 by the Forest Service, the ALWRI is an interagency effort to bring national and international focus to ecological and human dimension research to better understand and manage wilderness and other protected areas. With a mandate to both develop and provide information, the Leopold Institute aims to conduct and support scientifically rigorous research as well as apply research findings to management needs.

2. **Indicate how, by whom, and for what purpose the information is to be**

used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.

a. What information will be collected - reported or recorded? (If there are pieces of information that are especially burdensome in the collection, a specific explanation should be provided.)

This request is to administer a small subset of the previous approved survey. The data will be used to sample and monitor use patterns as input to quota system evaluation model for the Boundary Waters Canoe Area Wilderness. Specifically, the Overnight and Single Day Visitor Surveys for 2011 and 2012 will collect the following information:

- Group sizes;
- Methods of travel and transportation (canoe, hiking, motorized boat);
- Travel information;
- Perception of wilderness conditions and experience; and
- Demographics (i.e. gender, age, and ethnicity)

b. From whom will the information be collected? If there are different respondent categories (e.g., loan applicant versus a bank versus an appraiser), each should be described along with the type of collection activity that applies.

Respondents will be a sample of individuals, sixteen years or older, who visit the Boundary Waters Canoe Area Wilderness during the use season (May to September) of 2011 and 2012.

c. What will this information be used for - provide ALL uses?

A 1989, GAO evaluated over 32 million acres of classified wilderness under Forest Service management. GAO identified as a concern the Forest Service's lack of ability to determine the full extent of deteriorating wilderness conditions (U.S. GAO, 1989). A major GAO recommendation to the Forest Service was to develop baseline inventory information on the condition of designated wilderness areas and to monitor changes in the condition and use of wilderness. This information collection is vital to the Agency's ability to make management decisions and establish policy for wilderness management in general.

The data gathered will:

- Provide a basis for monitoring long-term resource and social conditions in wilderness;
- Provide substantial knowledge for decisions about wilderness allocation; and
- Be used in multiple research publications read by managers, commercial interest, academia, and the public.

The data will be used to drive travel simulation models to evaluate the success of use quotas employed at the Boundary Waters Canoe Area Wilderness to obtain desired levels of use density.

d. How will the information be collected (e.g., forms, non-forms, electronically, face-to-face, over the phone, over the Internet)? Does the respondent have multiple options for providing the information? If so, what are they?

Where permits are required, systematic samples (from random starts) are possible by contacting a sample of permit recipients. Mail-back questionnaires minimize the on-site burden for the visitor, causing a minimum of intrusion into the visitor's recreation experience. Another advantage of the mail-back questionnaire is the opportunity to reflect on responses, and perhaps provide more thoughtful, accurate responses than one would expect to receive in a personal interview. Answers to some questions are more appropriate after a trip (e.g. social conditions encountered at various locations, where the visitor traveled within the area, overall evaluations of the trip, etc.)

On some occasions, mail-back questionnaires are not as effective as on-site data collection. Proponents found, through previous surveys, that at easily accessible portions of wilderness there are often very casual short-visit day visitors. Although these visitors may indicate they will participate by completing a mail-back survey, the response rate for these short-visit day users is significantly lower than for other day users and all overnight campers.

When responses are particularly important to us, or we desire immediate or in-depth response regarding conditions encountered in the wilderness, obtaining on-site responses to questions has worked well. Visits to the Boundary Waters Canoe Area Wilderness are typically water-based, requiring loading and unloading a canoe, even for day visitors. Casual use of this wilderness is limited to a minimum of a few hours, typically. All visitors are required to have permits for access; therefore, sampling will be based on the permit system.

e. How frequently will the information be collected?

Collection of information will occur during May to September use season in 2011 and 2012. While many visitors make more than one trip in a season to the Boundary Waters Canoe Area Wilderness, screening of selected permits will support the goal of asking an individual to complete only one survey during a year.

f. Will the information be shared with any other organizations inside or outside USDA or the government?

The Leopold Institute is the unit of the Federal government focused on research in support of the National Wilderness Preservation System and represents both the Department of Agriculture and Department of Interior. For this reason, Federal agency managers and planners, academic instructors and students, membership organizations, and cooperative institutions place constant demand for publications from the Institute. These entities use Institute publications as a basis for informed management decisions.

The Institute's Research Applications Program proactively works to assure research results are available to managers. An interagency steering committee guides the Institute and assists in establishing research priorities, assuring USDA and DOI managers are aware of recent research findings.

g. If this is an ongoing collection, how have the collection requirements changed over time?

This is an ongoing information collection with emphasis on monitoring to capitalize on information collection from previous OMB-approved studies of Boundary Waters Canoe Area Wilderness visitors in 1967, 1991, and 2007. While basic information needs are the same, this renewal emphasis the detection of changing use patterns in 2011 and 2012 to evaluate success in accomplishing management objectives. Data collection will be less burdensome, focusing on a small part of the information collected previously.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g. permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also, describe any consideration of using information technology to reduce burden.

The focus of this request is on trends, therefore developing a data set comparable to ones obtained previously is important. While survey methods at times allow us to make web-based or e-mail versions available, we would like to maintain as many constant similarities as possible with earlier methods used. Data file development is highly automated and backed up for storage and analysis; thus, reports will be available on the Institute web site, and publications will be available at no cost to interested parties as they become available over the web site. Data collection methods will follow those used in the earlier baseline and trend studies, including access sites sampled and mail-back methods.

Recent literature contains information on administering surveys over the Internet. Such methods have been used in recent Institute studies. In addition, some visitors request surveys be available via the Internet. Survey developers considered this option and decided not to use the Internet for this survey. The desire is to replicate, as nearly as possible, the methods used in previous studies at this site. Proponents acknowledge that use of an Internet based survey would reduce the burden on the public, but the ability to make a direct correlation between newly acquired and past data (and the subsequent benefit to the public) justifies the slight increase of burden placed upon the public.

4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Item 2 above.

There is no duplication of effort. Data collected in this information collection is not available from other sources. The Aldo Leopold Wilderness Research Institute of the Rocky Mountain Research Station has been the only institution performing longitudinal analysis of wilderness users and use. Some continuing agency efforts monitor use levels at the forest-level across the country but are not aimed at illustrating trends or providing direct input to management.

Previous OMB Approved Studies: Under a previous Office of Management and Budget (OMB) clearance, in the early 1990s, studies of trends in visitor use and preferences were conducted in three wildernesses (Desolation Wilderness in California, Boundary Waters Canoe Area Wilderness in Minnesota and Shining Rock Wilderness in North Carolina). Previous information collected contributed to revisions of wilderness and backcountry management plans or updates; assisted in development of management strategies to reduce impacts from recreation use; aided in establishing objectives for visitor and resource management; and appeared in scholarly publications.

Current Information Collection Request: This ongoing information collection request will provide vital information on travel pattern trends at the Boundary Waters Canoe Area Wilderness in Minnesota. Managers and the public need to understand how actual visits have changed and whether changes are due to changing policies, natural disturbances, and national/regional/local societal changes in the early 21st century. This information will assist managers in adapting current programs to changing societal interests, needs, and use patterns.

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

   Small entities will not be participating in this study, though outfitter and guide businesses have indicated their willingness to cooperate when guests are asked to participate in the survey. Forest Service officials shared information about the survey with outfitter and guide businesses permitted for the Boundary Waters Canoe Area Wilderness.

6. **Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.**

   Since most areas have never had a study of visitor use patterns and behavior conducted, this study is capitalizing on a unique opportunity at the Boundary Waters Canoe Area Wilderness. There is fear that visitor use patterns, their expectations, and response to federal policies have been changing and will continue to change at a rapid rate. Without the ability to understand these changes, budget allocations could become inefficient, management policies ineffective, and potential to conform to the Wilderness Act intent less likely. The inability of the managing agency to develop objectives and determine wilderness conditions was the focus of a GAO evaluation and subsequent legislation.

7. **Explain any special circumstances that would cause an information collection to be conducted in a manner:**

   - **Requiring respondents to report information to the agency more often than quarterly;**
   - **Requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;**
   - **Requiring respondents to submit more than an original and two copies of any document;**
   - **Requiring respondents to retain records, other than health, medical,**

government contract, grant-in-aid, or tax records for more than three years;

- **In connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;**
- **Requiring the use of a statistical data classification that has not been reviewed and approved by OMB;**
- **That includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or**
- **Requiring respondents to submit proprietary trade secret, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.**

There are no special circumstances. The collection of information is conducted in a manner consistent with the guidelines in 5 CFR 1320.6.

8. **If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8 (d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.**

The Federal Register 60-day Notice requesting comments on this proposed information collection published on September 7, 2010 (Vol. 75, Number 172, pgs. 54296-54297). No comments were received.

Describe 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 record keeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.

The proponent contacted university faculty and scientists in the field who had made trips to the Boundary Waters Canoe Area Wilderness and commonly engage in this type of research. These individuals reviewed the survey methods and draft survey. They commented on all aspects of data collection, including complexity of questions and the value of each question proposed. Proponents considered the comments in developing the methodology and designing the survey.

Robert G. Dvorak, Ph.D.
Department of Recreation, Parks, &
Leisure Services Administration
Central Michigan University
Mount Pleasant, MI 48859

Dr. Neal Christensen
Christensen Research
Missoula, MT 59801

Dr. William T. Borrie
College of Forestry & Conservation
University of Montana
Missoula, MT 59812

Consultation with Forest Service Officials: Proponents consulted extensively with managers on the Superior National Forest. Exchanges included e-mail, letters, drafts of the measurement instrument and proposals, as well as participation in conference calls and interpersonal meetings. A great deal of wording changed due to consultation with managers; as well as development of on the ground validation procedures, which were pilot tested in 2010. Managers requested Leopold Institute extended engagement beyond the original study of visitor trends to provide them with a defensible approach to evaluating current use quotas in accomplishing stewardship objectives.

9. Explain any decision to provide any payment or gift to respondents, other than re-enumeration of contractors or grantees.

There are no plans for payment or gifts to respondents as incentives to respond.

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

At the beginning of each mail-back survey, the respondents are informed that their responses are voluntary. Respondents are assured that this is the only purpose of use of their name and address, and that all name and address files will be destroyed as results are obtained. Respondents are offered an opportunity to receive a summary upon completion of analysis and, those wishing to receive a copy, are informed that one extra mailing label will be created and kept for this purpose.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior or attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

The questions are not sensitive in nature and relate only to respondents’ visits to this area. They are asked for their evaluation of conditions encountered, past experience level, and travel patterns on their most recent trip. Due to the anonymity of the survey, the information received will not be connected to a specific individual.

12. Provide estimates of the hour burden of the collection of information. Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated.

- **Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. If this request for approval covers more than one form, provide separate hour burden estimates for each form.**

  a) Description of the collection activity
  b) Corresponding form number (if applicable)
  c) Number of respondents
  d) Number of responses annually per respondent,
  e) Total annual responses (columns c x d)
  f) Estimated hours per response
  g) Total annual burden hours (columns e x f)

Table 1

(a) Description of the Collection Activity	(b) Form Number	(c) Number of Respondents	(d) Number of responses annually per Respondent	(e) Total annual responses (c x d)	(f) Estimate of Burden Hours per response	(g) Total Annual Burden Hours (e x f)
Mailback survey – Overnight Visit	N/A	250	1	500	20 min (.3333333 hr)	166.66 ≈ 167
Mailback survey – Day Use Visit	N/A	250				
Totals	---	500	---	500	---	167

- **Record keeping burden should be addressed separately and should include columns for:**

  a) Description of record keeping activity: None
  b) Number of record keepers: None
  c) Annual hours per record keeper:
  d) Total annual record keeping hours (columns b x c): 0

- **Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories.**

Table 2

(a) Description of the Collection Activity	(b) Estimated Total Annual Burden on Respondents (Hours)	(c) Estimated Average Income per Hour	(d) Estimated Cost to Respondents
Mail back survey responses	167	$21.60*	$3,607.20
Totals	167	---	$3,607.20

*Estimated hourly wage estimate is from Bureau of Labor Statistics, May 2009 State Occupational Employment and Wage Estimates for Minnesota. http://www.bls.gov/oes/current/oes_mn.htm#00-0000. Mean Hourly = $21.60/hour

13. Provide estimates of the total annual cost burden to respondents or record keepers resulting from the collection of information, (do not include the cost of any hour burden shown in items 12 and 14). The cost estimates should be split into two components: (a) a total capital and start-up cost component annualized over its expected useful life; and (b) a total operation and maintenance and purchase of services component.

There are no capital operation and maintenance costs.

14. Provide estimates of annualized cost to the Federal government. Provide a description of the method used to estimate cost and any other expense that would not have been incurred without this collection of information.

The response to this question covers the actual costs the agency will incur as a result of implementing the information collection. The estimate should cover the entire life cycle of the collection and include costs, if applicable, for:

Employee labor and materials for developing, printing, storing forms

Employee labor and materials for developing computer systems, screens, or reports to support the collection

Employee travel costs

Cost of contractor services or other reimbursements to individuals or organizations assisting in the collection of information

Employee labor and materials for collecting the information

Employee labor and materials for analyzing, evaluating, summarizing, and/or reporting on the collected information

These costs were calculated by the Project Coordinator, Dr. Alan Watson, and reflect budgeted amounts from FY 2011 & 2012 within the Forest Service, Rocky Mountain Research Station budgeted allocations to the University of Montana and Leopold Institute expenses. The cost will be similar to the previous collection since there will be more complex modeling involved that is much more expensive than the simple descriptive statistics in the earlier phase.

Table 3

Budget item	Federal Government (FY 11 & 12)
Labor and material for developing, printing or storing forms	$10,000
Labor and material for developing computer systems, screens, or reports	$12,000
Employee travel costs	$2,600
Cost of contractor services	$25,000
Labor and materials for collecting the information	$7,500
Labor and materials for analyzing, evaluating, summarizing and/or reporting	$15,000
TOTAL	**$72,100**

15. Explain the reasons for any program changes or adjustments reported in items 13 or 14 of OMB form 83-I.

The Forest Service is requesting approval for 167 annual burden hours, based on 500 annual responses. Discontinuation of on-site interviews, reduction of the collection time, and shorter surveys are the primary reasons for the decrease in burden hours requested.

16. For collections of information whose results are planned to be published, outline plans for tabulation and publication.

As with other trends studies, the most immediate outlet is usually production of a government publication that is available for download from the Forest Service Wilderness website and available to order hard copy at no cost from the Forest Service publications center. Most people with intense interest in wilderness planning or management frequent the website. Additionally, proponents develop scientific reports for the International Journal of Wilderness, the premier scientific and educational journal supported by federal wilderness management agencies and cooperating organizations.

Additionally, preparation of presentations and publications for regional, national and international conferences and symposia are important outlets for students, academics and others who may be involved with similar research. In all cases, drafts intended for publication are required (by Forest Service policy) to be peer reviewed before submission, even if to a peer reviewed journal. A structured peer, statistical, and policy review system ensures Forest Service reports are high quality.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.

The OMB expiration date and information collection number will be displayed.

18. Explain each exception to the certification statement identified in item 19, "Certification Requirement for Paperwork Reduction Act."

There are no exceptions to the certification statement.