The 2014 Supporting Statement A for OMB 0596-NEW
Arctic National Wildlife Refuge Visitor Study

Introduction to the Leopold Institute

The Aldo Leopold Wilderness Research Institute (ALWRI) was established in 1993 by the USDA Forest Service in Missoula, Montana as an interagency (Departments of Agriculture and Interior) effort to bring national and international focus to ecological and human dimensions research relevant to understanding and managing wilderness (areas designated by Congress under the authority and process of the Wilderness Act of 1964) 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. The goals of the Institute are: (1) to provide leadership in development and communication of the knowledge needed to protect and preserve wilderness and the ecological and social values derived from wilderness; and (2) to facilitate the application of this knowledge within the wilderness management agencies and other organizations. The Leopold Institute's research program focuses largely around five priority issues, one of which is to understand recreation use trends and the effects of recreation use and recreation management strategies on wilderness attributes and visitor experiences; another is to understand how relationships between people and lands protected for their wilderness values affect and are affected by management policies and actions.

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.

PL 88-577, *The Wilderness Act,* directs that wilderness be managed to preserve natural conditions and to provide outstanding opportunities for solitude or a primitive and unconfined type of recreation. The Act also indicates our National Wilderness Preservation System is to be administered 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, and encourages the gathering and dissemination of information regarding the use and enjoyment of these areas as wilderness.

For managers of federal conservation units established by the Alaska National Interest Lands Conservation Act of 1980, they also must protect wilderness resource values and related recreational opportunities. To meet these management goals, managers must adapt their programs to changes in the amount and type of use and resultant conditions. It is important managers be aware of likely visitor response to proposed management actions and visitor preferences for resource conditions. Please refer to http://leopold.wilderness.net/pubs/767.pdf for more information on research to support decision making for special provisions legislation in Alaska and elsewhere in the US.

The Leopold Institute intends to record visitor responses at the Arctic National Wildlife Refuge in 2015 for comparison to the most recent survey there, in 1977 (prior to Refuge status and wilderness designation), and address current management planning information needs by questioning visitors about major dimensions of experiences there and factors that influence those experiences, as well as obtain visitor response to potential management actions in the future.

The Supporting Statement A for OMB 0596-NEW
2015 Arctic National Wildlife Refuge Visitor Study

Background

The Arctic National Wildlife Range was established in 1960 for the purpose of "preserving unique wildlife, wilderness, and recreation values." Noteworthy is the fact that the Range's establishing order specified "preserving unique . . . values," and that two of those three purposes relate directly to the experiences of visitors. Subsequent refuge system legislation has contributed statutory significance to each of these values, and the Refuge Improvement Act of 1997 emphasized the importance of providing recreational benefits, specifically those related to hunting, fishing, wildlife observation, photography, and environmental education and interpretation.

Over the years the Arctic National Wildlife Range has become the Arctic National Wildlife Refuge, grew to over 19 million acres and now contains the 8 million acre Mollie Beatie Wilderness, designated in 1980. Unfortunately, very little is known about the characteristics, activities and preferences of visitors to all wilderness and other wild lands in Alaska.

Scientists have undertaken innumerable biological projects which have been highly successful in enhancing our understanding of wildlife and ecological resources and furthering their preservation. However, to date, the Refuge has not undertaken any systematic studies of the area's wilderness or recreational values, what makes them unique, or how they are to be preserved and managed for public uses. This visitor study will address those needs. The information from this collection effort will specifically be used to inform the pre-planning stage of the Refuge's upcoming Wilderness Stewardship and Visitor Use Management Plans.

Only one study of visitors and their attitudes has been conducted at the area now known as the Arctic National Wildlife Refuge. This 1977 study, conducted by Greg Warren as a summer employee of what was then the Arctic Wildlife Range, and a student at the University of Idaho, occurred before wilderness designation of a large part of the Refuge, and re-titling the area as a Refuge, both of which were a result of the Alaska National Interest Lands Conservation Act of 1980. In this study, 300 visitors were contacted to help understand use distribution, socio-economic characteristics of non-local recreation visitors, the activities they participated in, their management preferences, and to estimate visitor participation levels in recreational uses.

The 1970's, sometimes called "the environmental decade," witnessed great changes in interest in wilderness recreation with many new recruits to backpacking, new practices such as minimum impact camping and wilderness ethics, and expansion of the wilderness system. The 1980's began with an apparent reversal in this trend. While a tremendous proportion of the National Wilderness Preservation System was added during and after 1980, the "environmental decade" was over. The peak in wilderness use in the early 1980s was thought to indicate changing lifestyles for the baby boom generation as they transitioned to family development and career positioning. As transportation to the Arctic becomes easier and globalization brings Arctic issues to everyone's doorstep, however, use trends are undocumented, and it is unclear how management actions at places like the Arctic National Wildlife Refuge will adapt or be strengthened to protect visitor experiences and strengthen the relationship distant visitors have formed or will form with this large protected landscape.

This proposed information collection is needed to update managers and the public on how visitors and their visits have changed as a result of changing policies; natural disturbances; and national, regional and local societal changes that occurred in the 1980s, 1990s and early 21st century. This survey data will help managers continue to adapt their current programs to changing societal interests and needs, and meet the intent of the legislation that created the Arctic National Wildlife Refuge.

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.)**

      Respondents will be asked for their responses and opinions on topics such as:

      - how many times they have visited and plan in the future to visit the Arctic Refuge;
      - the frequency of past visits and the activities they have engaged in;
      - when visiting, do they come in groups, and, if so, the size of those groups;
      - if their group was commercially outfitted or guided on the trip;
      - how long they stayed at the Refuge;
      - if they have preferences for social conditions; for example, do they accept current use density and recreational impacts;
      - if they recognize trends in resource impacts and problems associated with new technology or changes in use behaviors;
      - if they have recommendations or expectations for management actions that will protect the experiences they expect in this place or to increase visitor enjoyment of the wilderness qualities found there.

      Data collected in this collection effort is not available or expected to be available from other sources.

   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 non-local visitors, sixteen years or older (instructions on post card reply places this limit on response), who visit the Arctic National Wildlife Refuge. The target population for this study will include recreation visitors and recreational hunters to the Arctic National Wildlife Refuge from

June 1 to the end of October 2015, the primary recreation and hunting seasons.

The target population does not include local individuals living within the subsistence zone and visitors who are qualified to participate in subsistence activities in the refuge regardless of their current activity. Recreational flight-seers that do not land in the refuge are not considered to be part of the study population.

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

Study Purpose, Goal, and Objectives

Primary Purpose: To provide information related to the visitor's experience of the Arctic National Wildlife Refuge for use in developing the Wilderness Stewardship and Visitor Use Management Plans, and in making large and small-scale management decisions that affect the visitor's experience, both directly and indirectly through protection or restoration of the wild and natural characteristics of this place.

Overall Goal: To seek a more detailed and current understanding of the Arctic National Wildlife Refuge visitors' experiences, what factors enhance or detract from the quality of those experiences, and attitudes toward potential management actions that could be taken to protect wilderness resource values and related recreational opportunities of the Refuge.

Specific Objectives:

(1) Describe visitor demographics and trip characteristics at the Refuge:
   a. individual visitor demographics, frequency of visits, and residence; and
   b. trip characteristics, such as method of access, length of visit, size of group, and activities (e.g., hunting, hiking, fishing, etc.);

(2) Describe experience dimensions most desired by visitors and the things that influence them.

(3) Evaluate how visitors' experience dimensions at the refuge can be protected, enhanced, or negatively influenced by environmental and social conditions, and managerial actions.

Project Application

This research will contribute to the development of two Arctic National Wildlife Refuge planning documents:
- Wilderness Stewardship Plan
- Visitor Use Management Plan

This research will also be used to further scientific knowledge:
- Advancement of knowledge about visitor experiences in unique public lands of the Arctic; and

- Publication of results and new understanding in scientific journals.

Examples of how the information may be used:

A. In development of visitor management strategies:

Development of *Leave No Trace* recommendations and requirements, selection of indicators and standards for wilderness planning; consideration of registration/permit/rationing systems; development of crowding/encounter standards and management approaches; dispersing use; use allocation methods; development of interpretive messages and themes; determining the types and detail of trip information to be collected and provided; consideration of recreational and access developments; development of law enforcement strategies; addressing issues related to aircraft over-flights, airstrip impacts, and access; potential use of helicopters and new forms of technology for public access/use; considering the appropriateness of geo-caching; considering potential visitor-subsistence interactions/conflicts; considering zoning for different experiences; development of monitoring techniques; identifying other informational needs and contribute in a positive way to private sector marketing and interactions with Alaska State agencies about future policy decisions.

B. In evaluating other potential agency actions that may less directly affect visitor perceptions and experiences at the Refuge:

Consideration of actions or proposals related to maintaining natural diversity, habitat manipulation, and predator control; perpetuation of wildness and the freedom of natural processes; use of helicopters for official uses not necessary for protecting resources; considering the appropriateness of certain research techniques and installations; development of interpretative messages and themes not specific to visitor use; responding to requests to name Refuge features.

Previous information collection of this type has been used in the past for: (1) developing and updating wilderness and backcountry management plans, as part of required Forest, Refuge and National Park plan revisions; (2) guiding development of communication plans for informing and educating the public about wilderness opportunities and regulations; (3) providing a basis for monitoring long-term resource and social conditions in wilderness; (4) providing substantial knowledge for making decisions about wilderness allocation, facility development, and non-wilderness area management; and (5) providing valuable information to local communities, State government agencies and private sector businesses about non-local visitors to public lands. Multiple research publications will be developed to inform managers, commercial interests, academia and the public about findings.

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?

Because of the small population, difficulty contacting visitors and uncertainty of travel introduced by vast areas and rapidly changing weather, the sampling method will be designed as a cluster sample, targeting heterogeneity of visitors during a sample of weeks during the study period. A cluster sample means we will make contact with every visitor we possibly can during each selected week, assuming the final sample to be heterogeneous, and not biased. Air taxi pilots are a primary contact point for most visitors to the refuge, and these pilots have been asked to distribute postcard invitations to participate in the study to each of their clients during the 2015 use season. No additional burden is placed on these commercial operators, who operate under permit with the agency and are required to pass other information to visitors and report visitor levels to the agency. Other sources, such as hunting license information that is available through the State of Alaska has been offered by the State for understanding how successful personal contacts were carried out. Voluntary signup sheets at regional transportation hubs and visitor contact stations managed by the federal agencies in this part of Alaska will be used to supplement the contacts made by air taxi pilots during weeks selected for sampling. Postcards handed to visitors by the air taxi operators or taken voluntarily at regional transportation hubs and visitor centers will ask the respondents for their contact information - both postal and e-mail, and ask them for their preferred method of contact for participating in the study.

The postcards will be self-sealing to protect confidentiality, include pre-paid postage, and will be addressed to be mailed to the study sponsors. The returned postcards will be used to initiate participation in the actual study. All responses will be voluntary and confidential. Each respondent will then receive either an e-mail letter with a link to an electronic survey or be mailed a copy of the questionnaire booklet and a letter explaining the purpose of this information collection activity. Those receiving the mail back version will also get a pre-paid, addressed envelope to use for returning the questionnaire. All mailings will come from the Aldo Leopold Wilderness Research Institute, where all databases will be maintained. Names and addresses of visitors will be destroyed upon completion of their returned survey. These items will not be held indefinitely or associated with any of the respondent answers for this type of information collection. During the data collection period all personal identification information will be on password protected computer locations available only to the research personnel. This information will not be shared with the managing agency or moved in any form from the point of electronic collection until it is destroyed.

Data collection will follow standardized and well-proven methods. There is an abundance of literature that directs the successful collection of this type of information from recreation visitors. Response rates are usually high (65 to 85%, typically in past visitor studies conducted by the Leopold Institute using a variety of methods, from sampling permits, voluntary registrations and personal contact made at access points), and negative public response to burden is relatively low (visitors seldom complain, they often include comments thanking us for asking for their input).

Variation in sampling procedures has been necessary across study sites and study purposes. In areas such as the Arctic Refuge where permits are not required, we have used mixed methods of contacting visitors at trailheads and permit distribution centers in order to make personal contact with the visitors on-site. During these visitor contacts, interviewers may obtain site-visit information and mailing addresses to send questionnaires to visitors at their homes. Response rates for on-site recreation contacts are normally high. As long as contact is timely and short, cooperation is excellent. Having on-site contact increases mail-back response rates approaching 100% due to the personal commitment to participate obtained by the interviewer.

Visitors are not contacted within the protected area boundary to avoid impacting visitor experiences. Mail back questionnaires, however, 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. Also, some types of questions are most appropriately answered after a trip such as social conditions encountered at various locations, where the visitor traveled within the area, overall evaluations of the trip, etc.

To maintain interest and obtain high response rates to mail back surveys, each person who elects to participate through the mail back survey commonly receives a reminder and thank you card approximately one week after they receive the first mail back package. Those visitors who have not returned their completed survey within three weeks of the original mailing will receive a second copy of the questionnaire with a report on response rates at that time and a message that stresses the importance of receiving information from each member of the sample. Those who respond by e-mail will receive a similar series of e-mail letters, and, if a postal address can be obtained, non-respondents will also receive a final hard copy in the regular mail. Response rates using this survey methodology commonly reach 65 to 85% of all people contacted. We expect a relatively high response rate for this study.

The mail back and electronic surveys will contain the following important OMB information: the OMB clearance number clearly visible on the cover page and first page of text; a paragraph at the beginning of the survey that provides an estimate of the time required to complete the survey, a clear explanation that all responses are voluntary, and that names and addresses will never be associated with any information they provide in response to the survey. A paragraph at the end of the survey directs the respondent to provide the Office of OMB and the Department of Agriculture Clearance Officer with any relevant comments about this information collection.

Measurement Instrument

The mail-in post card will include a small number of items that not only allow mailing the survey, but also some items to help us estimate whether a non-response bias is present in the data obtained.

A survey questionnaire will be used to collect the quantitative data for this study. The questionnaire will include both hard-copy mail back and electronic web-based formats designed to produce comparable results regardless of response method. The questionnaire is arranged in five general sections. Section A measures trip characteristics, Section B focuses on desired experiences, Section C captures the magnitude of some Arctic Refuge characteristics that may influence visitor experiences, Section D measures opinions about management options, and section E collects data on respondents' history of use and demographic characteristics. Section F asks for any additional comments the respondent may want to make to managers about ways to protect desirable Refuge experiences.

During their annual required training for commercial pilots and air taxi operators, agency personnel will familiarize cooperators with how to include the mail-in post card along with other required material given to visitors. Local outfitters and guides have been briefed on this process and enthusiastically support the prospects of obtaining this updated trend information and have indicated their desire to help collect information.

Recent literature has provided guidelines for administering surveys over the internet, and in some of our recent studies, visitors have requested electronic-response format (Dillman, D. A. (2007). *Mail and Internet Surveys: The Tailored Design Method.* Hoboken, NJ: John Wiley and Sons, Inc., 523 p.). We will follow guidelines in Dillman to develop electronic formats to reduce burden.

e. How frequently will the information be collected?

This information will be collected once for each visitor contacted during the 2015 recreation season, representing one trip to the Arctic National Wildlife Refuge. Before mailing or e-mailing surveys to potential respondents, the name and address data base will be searched to assure only one mailing goes to each potential respondent.

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

The Leopold Institute is the only research unit of the federal government focused on research to support the National Wilderness Preservation System and other protected areas, representing both the Departments of Agriculture and the Interior. For that reason, federal agency managers and planners, academic instructors and students, membership organizations and other stakeholders place constant demand on publications from the Leopold Institute to inform management decisions. The Leopold Institute has a Research Applications Program that proactively works to assure that research results are available to managers, and the Institute is guided by an Inter-agency Steering Committee that helps develop research priorities and assures that agency managers are aware of recent research findings. Funds have recently been awarded the Leopold Institute to allow us to archive all existing data sets following a national protocol for Forest Service Research and move toward making all research data available for secondary analysis through our web site. The information will be shared with university faculty, students, the State of Alaska, and other interested parties within 2 years of completion of data set development.

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

This is a new information collection.

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.**

Respondents will have the option and are encouraged to receive the survey and then return the completed survey by e-mail.

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. The Aldo Leopold Wilderness Research Institute of the USDA Forest Service Rocky Mountain Research Station has primary responsibility for conducting and facilitating research of this type for the federal government. The Leopold Institute is not planning any other information collection at this location or other Wilderness Areas in the State of Alaska, at this time.

   The Institute has worked closely with managers at the Arctic National Wildlife Refuge and the regional social scientist in Anchorage to collaboratively plan the research. Phone calls and electronic correspondence with Arctic National Wildlife Refuge managers, the regional social scientist and Washington Office administrators confirmed that there are no similar data collection activities occurring at the Refuge. Currently there are no similar visitor surveys planned at other Refuges in Alaska that could contribute to planning at the Arctic Refuge.

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

   Guide and outfitter businesses permitted for the Arctic National Wildlife Refuge have been informed about this project, and have been asked for their cooperation in making contact with visitors during the 2015 visitor season. Interest and cooperation are high among these small business operators. To minimize burden on the outfitters and guides, they are only asked to hand out the self-explanatory registration card to customers and return all cards they did not distribute with their end of season reports. The postcards will be numbered sequentially to make it easy for agency representatives to calculate how many were distributed. They are not asked to keep any records.

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 wilderness areas have never had a study of visitor preferences, characteristics, and behavior conducted, this study is capitalizing on a unique opportunity at the Arctic National Wildlife Refuge. The Refuge staff is concerned that visitor use patterns, visitor 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 compliance with the Wilderness Act and the Refuges Improvement Act will become more challenging.

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;**

Responses are typically received in fewer than 30 days from the receipt of the survey by the respondent. To encourage quick response, within one week after the initial postal or electronic mailing of the survey they will receive a reminder postcard or e-mail. In another three weeks, if they still have not responded, they will receive a full mailing or e-mailing of materials directing them on how to respond. This encouragement of a quick response contributes both to higher response rate and accuracy of recollection of trip experiences and evaluations of those experiences.

- **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**

  Subjects will be informed that their responses are in confidence and their names and addresses will not be connected to their responses. All name and address information will be destroyed/deleted in electronic files after data collection ceases. On the survey, a notice will be included that informs the respondent of where they can look on the internet to obtain a summary of findings as soon as it is available.

- **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 other 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 for this new information collection was published on January 31, 2013, Vol. 78, page 6805. The Forest Service received one comment.

One response was received from the ANILCA Coordinator for the State of Alaska. The Refuge Staff and Leopold Institute scientists specifically asked the State to comment and they provided many suggestions on earlier drafts of the survey. The State supports gathering information with respect to public uses within national wildlife refuges to inform decision making. Efforts to coordinate with the State are appreciated due to overlapping responsibilities with State agencies. The State expressed concerns that the survey does not address local user issues and we do not explain how information obtained from local residents would be incorporated into these data. The State questioned the plan of applying wilderness research to the entire refuge; they encouraged rigorous comparison of new data to the 1977 data; the State acknowledged the complexity of contacting visitors and encouraged efforts to represent the population of visitors; the State commented on a 2008 effort to test contact methods and encouraged greater effort to contact hunters and establish more contact opportunities at regional hub airports, sportsman's groups and retailers; the State suggested contacting hunters from the year previous to the survey instead of waiting for hunter contact information from the State during the data collection year; the State encouraged more acknowledgement of the pilot testing of methods and survey process in 2008 as having provided valuable information as input to the data collection planning; the State suggested maintaining records in a way that we can separate responses from recreation visitors from visitors who are working (e.g., guides, researchers, etc.); the State is particularly interested in how hunter attitudes differ from those of non-hunters; the State strongly encouraged efficient method of electronic participation; and the State encouraged focus on questions of practical utility to the Refuge managers.

We responded to the State about every comment they submitted. In this support statement, and in committing funding, more effort by the agency to make visitor contact is planned, including working with the State to contact hunters who visit the Refuge. We agreed with their encouragement to maintain the ability to compare various types of users, particularly hunters and non-hunters and recreation visitors and those working in the Refuge. And we will work hard to make electronic response efficient and successful. Consultation with the State is on-going and we appreciate their support of this data collection.

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.

A variety of review responsibilities were undertaken by multiple people who are familiar with the Arctic Refuge and past research there. In lieu of identifying people who may decide to visit the Refuge during 2015, extensive contact has been made with Refuge managers who have in turn communicated about the study with commercial guides and outfitters and obtained their input on additional questions or issues that they would like to hear about from visitors.

In addition, we contacted university faculty and other scientists in our field and in Alaska that we knew had an interest in public lands management. We asked them to review the methods proposed, the survey drafted and comment on all aspects of data collection, including complexity of questions and the value of each question proposed, both old ones asked previously and new ones. Our reviewers have confirmed that there are no other data available to guide these planning activities, that only one survey per respondent is appropriate, the survey draft has clear instructions, our proposed record keeping process is consistent with standards in the field, and our intent to make data available to other agencies and organizations is appropriate. Our primary reviewers were:

Dr. Roger Kaye (long term wilderness specialist, pilot and air taxi liaison at the Arctic National Wildlife Refuge)
Arctic National Wildlife Refuge
Fairbanks, Alaska

Dr. Jeffrey J. Brooks, Social Scientist
National Wildlife Refuge System, Division of Conservation Planning and Policy
Anchorage, AK

Dr. Neal Christensen (consultant with experience in northern Alaska public lands recreation issues)
Christensen Research
Missoula, MT

Dr. Peter Fix
University of Alaska – Fairbanks
Fairbanks, AK

Additionally, extensive consultation was conducted with representatives of the State of Alaska and managers at the Arctic Refuge. E-mail, letters, drafts of the measurement instrument and proposals were exchanged, as well as participation in conference calls and hosting Dr. Kaye at the Leopold Institute for study planning. Written comments were obtained from Alaska State representatives and from managers at the Arctic National Wildlife Refuge, mostly agreeing with the importance of having this information, with many valuable suggestions for wording of questions to apply to the unique issues facing northern Alaska and the Arctic National Wildlife Refuge. Scientific review was obtained by Eric Porter, NASS OMB Clearance Officer,
Survey Development and Support Branch. Eric concluded the purpose of this study is clearly stated; the justification, background and other information related to the target population and study purpose are clearly outlined; and the argument for the usefulness of the results is also well written. He also concluded that the overall study design is put together very well. He suggested we consider greater efforts to reduce duplication and to elaborate more on analysis plans, which we have done. He concluded that this study should be successful if carried out as described in these documents.

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.

This is a new information collection and as such, respondents cannot be identified prior to the implementation of this survey.

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. It is planned by Refuge staff to waive for one year the Fish & Wildlife Service outfitter fees for commercial service providers who cooperate with this study in making visitor contacts (approximately $100/year).

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

During each visitor contact and at the beginning of each e-mail-back survey, the respondent will be informed that their responses to the questions being asked are voluntary and confidential. They will be asked to provide their name, address, and e-mail address for (e)mailing the questionnaire to the respondent. We will assure respondents that the visitor survey is the only purpose of obtaining the name and address, and that all name and address files will be destroyed as soon as the response is received. At that point there will be no way to associate contact information with survey responses.

All respondents will be offered an opportunity to receive summary results from the Arctic Refuge web site upon completion of analysis.

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.

No questions of a sensitive nature are asked of respondents.

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)

The study will describe visitors across the use season based on a cluster sample of all visitors during a 50% sample of weeks from June 1 to the end of October (22 weeks – 50% systematic selection of 11 weeks for sampling). The pool of visitor names obtained from all sources during the study season will be used for this purpose. The goal will be to obtain contact information from all visitors during the study period. Assuming a 65% response rate to the mail back or electronic survey, and assumption of contact with half of the estimated population of users (1180) a target of 590 contacts during the sample period should produce at least 384 questionnaires returned from visitors, only slightly more than the sample taken in 1977 (300 visitors).

Assuming that the response is not biased, a sample of 384 returned questionnaires is sufficient to obtain good representation of the population and to draw significant statistical conclusions and comparisons across types of use. If a random sample of 384 were selected from a large population, statistics for continuous variables could be estimated with a confidence interval of +/- 5% or less at a confidence level of 95%. This confidence interval and level is generally accepted as sufficient for peer-reviewed survey research.

This study design calls for cluster sampling of a small, difficult to contact population. Assuming the systematic sampling (selecting every other week from a random start) method is not biased, the results will be acceptable. Statistical tests of significance conducted assuming random sampling from a large population will be conservative for this sample, so significant findings will be at least as reliable as calculated.

Table 1. Obtaining a 65% response rate (n=384) from a cluster sample of 590 contacts.

Survey	Sample Size	Freq	Responses				Non-response				Total Burden Hours
			Resp. Count	Freq x Count	Min./ Resp.	Burden Hours	Nonresp Count	Freq. x Count	Min./ Nonr.	Burden Hours	
Visitor Post Card	590	1	480	480	2	16	110	110	2	3.66	19.7
Survey - first Mailing	480	1	304	304	18	91.5	176	176	2	6	97.5
Post card reminder	176	1	0	0	0	0	176	176	1	3	3
Survey second mailing	176	1	80	80	18	24	96	96	2	3.2	27.2
Total			864	864		131.5	558	558		16	147.5

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

a) Description of record keeping activity:
b) Number of record keepers:
c) Annual hours per record keeper:
d) Total annual record keeping hours (columns b x c):

There is no record keeping requirement associated with this survey.

- **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
On-site and mail back survey response	147.5	$22.33	$3293.68
Totals	147.5	---	$3293.68

*The estimate of $22.33/hour to accomplish the collection activity for the forms assumes an average compensation for both men and women in management and professional positions, according to the Bureau of Labor Statistics, May 2013. (http://www.bls.gov/oes/current/oes_nat.htm#11-0000).

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 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 2015 & 2016 within the Forest Service, Rocky Mountain Research Station budgeted allocations.

Budget item	Federal Government (FY 15 & 16)
Labor and material for developing, printing or storing forms	$10,000
Labor and material for developing computer systems, screens, or reports	$7,000
Employee travel costs	$500
Cost of contractor services for data collection mailing and coding data	$22,500
Labor and materials for administering and protecting the information	$5,000
Labor and materials for analyzing, evaluating, summarizing and/or reporting	$10,000
TOTAL	$48,070

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

This is a new information collection.

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

As with other public lands visitor studies, our most immediate outlet is usually production of a government publication that is available for download from our website and available to order hard copy at no cost from our publications center. People interested in wilderness and protected area planning or management frequently use our website.

Additionally, we will develop scientific reports for the International Journal of Wilderness, the premier scientific and educational journal supported by our 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 valid OMB control number and expiration date will be displayed on all instruments.

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

The Agency is able to certify compliance with 5 CFR 1320.