



PROGRAMMATIC REVIEW AND CLEARANCE PROCESS FOR NPS-SPONSORED PUBLIC SURVEYS



The scope of the Programmatic Review and Clearance Process for NPS-Sponsored Public Surveys is limited and will only include individual surveys of park visitors, potential park visitors, and residents of communities near parks. Use of the programmatic review will be limited to non-controversial surveys of park visitors, potential park visitors, and/or residents of communities near parks that are not likely to include topics of significant interest in the review process. Additionally, this process is limited to non-controversial information collections that do not attract attention to significant, sensitive, or political issues. Examples of significant, sensitive, or political issues include: seeking opinions regarding political figures; obtaining citizen feedback related to high-visibility or high-impact issues like the reintroduction of wolves in Yellowstone National Park, the delisting of specific Endangered Species, or drilling in the Arctic National Wildlife Refuge.

SUBMISSION DATE: 6.20.2018

PROJECT TITLE: Wind Cave National Park (WICA) Visitor Use Survey

ABSTRACT: (not to exceed 150 words)

The results of this collection will inform upcoming park planning at Wind Cave National Park (WICA). For planning purposes, it is necessary to understand who visits, and visitor use, evaluation, and experience of park resources, facilities, and services. A visitor study was conducted in 2010 and since that time visitation trends have changed which may have led to changes in visitor populations coming to WICA. Annual use at WICA has increased from 577,000 to 617,000 recreation visits annually, and tourism has increased substantially statewide. A visitor survey will be conducted in summer 2018 to collect information about visitor use, and visitor evaluation and experience of park resources, facilities, and services.

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PROJECT INFORMATION:

Where will the collection take place? Wind Cave National Park (WICA).

Sampling Period Start Date: July 13, 2018 Sampling Period End Date: July 22, 2018

Type of Information Collection Instrument: (Check ALL that Apply)

- Mail-Back Questionnaire Face-to-Face Interview Focus Groups
 On-Site Questionnaire Telephone Survey

Other (List)

Will an electronic device be used to collect information? No Yes - Type of Device:

SURVEY JUSTIFICATION:

Social science research in support of park planning and management is mandated in the NPS Management Policies 2006 (Section 8.11.1, "Social Science Studies"). The NPS pursues a policy that facilitates social science studies in support of the NPS mission to protect resources and enhance the enjoyment of present and future generations (National Park Service Act of 1916, 38 Stat 535, 16 USC 1, et seq.). NPS policy mandates that social science research will be used to provide an understanding of park visitors, the non-visiting public, gateway communities and regions, and human interactions with park resources. Such studies are needed to provide a scientific basis for park planning and development.

With more than 120 miles of explored and mapped passages, Wind Cave National Park (WICA) ranks among one of the longest caves in the world. The park's 2012 Long Term Management Plan (LTMP) indicated that the desired visitor experiences should be physical, intellectual, and emotional and should be available for all visitors coming to the park. WICA management team requested this visitor study to provide information needed to measure the effectiveness of goals set in the 2012 management plan. Information is also needed to understand more about current visitor use patterns and up-to-date visitor opinions about park resources, facilities, and services.

Over 620,000 visitors come to Wind Cave National Park annually. This figure is from the park's monthly public use data¹. From the total number of visitors, about 16% (96,328) go on cave tours. Data is needed to determine how visitor use and tour activities may affect the geological and biological resources within the park.

The Park Studies Unit of the University of Idaho conducted a comprehensive visitor survey in 2010. Survey results helped provide visitor use information used in the 2012 LTMP providing the demographic make-up of park visitors, as well as what they did or did not like about their experience. The survey also addressed economic impacts to the region from park visitation. This information collection will help fill knowledge gaps needed to improve park management decisions. Park managers and planners need to know more about: a) the demographics of the public visiting the park, b) the potential impacts of increased visitor use, and c) visitors opinions about park resources, facilities, and services. Since the last survey conducted in 2010, the WICA planning team has relied on outdated data on visitor demographics, preferences, and expectations. The 2010 data must be updated because management strategies must be developed based upon increased use, visitation patterns and changing demographics.

¹ WICA News Release, January 14, 2016: <https://www.nps.gov/wica/learn/news/01142016pr.htm>

A mail-back survey will be used to collect information for this study. The survey instrument will ask questions related to trip planning, use of park resources, services and facilities, activities, demographics, and spending.

SURVEY METHODOLOGY:

(A) Respondent Universe:

The respondent universe for this collection will be all recreational visitors, age 18 or older, visiting designated intercept locations within WICA during a one-week sampling period in mid-July of 2018.

(B) Sampling Plan / Procedures:

A self-administered mail-back survey will be distributed on site. The survey packets will include a booklet-sized questionnaire and a pre-addressed envelope affixed with a U.S. first class postage stamp.

At each of the three WICA entrances, visitors will be randomly selected using a “timed interval approach. One visitor group will be selected every N minutes of the day (where N~11 minute intervals each hour). This approach will allow for an even distribution of questionnaires throughout the sampling period (across days and hours). During the sampling period, we expect to contact 1,125 visitors. The number of participants will be evaluated after each sampling day. If expected targets were not reached, the time interval between groups will be adjusted to meet overall target sample size. The following protocol will be used to implement the “timed-interval” approach to select participants:

1. At the designated start time, the survey administrator will contact the first visitor group to enter the survey area and ask them to participate in the survey. If the group agrees to participate, the survey administrator will initiate collection process (see *Instrument Administration*). At the end of each positive contact, the survey administrator will wait until the start of the next time interval before selecting the next visitor group.
2. When there is a negative contact (i.e., refusal) the survey administrator will conduct the non-response bias check. After that they will select the very next visitor group until a positive contact is made. Once a positive contact is made the survey administrator will not make another selection until the start of the next time interval. The survey administrator will repeat this sequence of steps throughout the sampling day. All visitors contacted will be asked to answer the non-response bias questions.

(C) Instrument Administration:

The survey design and sampling plan for the collection is based on The Tailored Design Method (TDM) (Dillman, 2014), with an emphasis on mixed modes of delivery: onsite solicitation, a mail back survey, and follow-up procedures. The TDM has been shown to increase response rates, improve accuracy, and reduce cost and burden hours. The methodology has been used in more than 250 surveys conducted by the NPS Visitor Services Project (VSP). All of the questions appear in the current NPS Pool of Known Questions (OMB 1024-0224; Expiration date: 5/31/2019).

A mail-back packet containing a booklet-sized questionnaire and a self-addressed stamped envelope will be distributed on-site.

At the start of the sampling period, the first visitor group to enter the sampling area will be greeted and asked they would be willing to participate. Approximately one minute will be used during the initial contact to explain the purpose of the study and to select the adult member of the group (18 years or older) with the next birthday to serve as the respondent for the survey. That individual will be: 1) asked to answer the non-response bias questions, 2) given a survey packet and 3) asked to fill out an address card (name, address and questionnaire code number from the questionnaire). This information will only be used to follow-up with all visitors accepting a survey packet but have not returned the completed questionnaire. Following Dillman's TDM, within 10 working days of accepting a survey packet, all visitors receive a thank you/reminder postcard. A second reminder letter, replacement questionnaire, and postage-paid return envelope will be sent to all non-respondents 20 working days after completion of on-site contacts. After the second reminder, all files containing the visitor's contact information collected on site will be destroyed.

All visitors refusing to participate in the survey, will be asked to respond the non-response bias questions (listed below, in item 9e). The interviewer will also record observable information (i.e., current time, initial contact's gender) in a survey log. Observational data will be collected whether or not they agree to participate or answer the non-response bias questions. The number of refusals will be recorded and used to calculate the overall response rate at each park unit and for the study overall.

The following script will be used during the initial contact:

"Hello, I am conducting a survey for Wind Cave National Park to better understand your opinions about the programs and services here. Your participation is voluntary and all responses will be kept anonymous. Would you be willing to take a questionnaire (show packet) and mail it back using the postage paid envelop?"

→ If **YES** - then ask, *"has any member of your group already participated in this survey?"*

If **"YES"** (previously agreed to participate) then,
"Thank you for agreeing to participate in this study, we hope that you will return the questionnaire soon, if you have not already. Have a great day."

If **"NO"** (have not previously agreed to participate and there is only one adult in the group) then,
Thank you! [hand respondent packet; point to stamp]. Here's the questionnaire. You can mail it back in the same envelope. We need your address to send you a replacement if we don't hear from you in two weeks [hand address card], and I have a few quick questions. [After they complete the address card, the surveyor will ask them to answer the non-response bias questions (listed in item 9e). The responses will be recorded in spaces provided on the survey log. The surveyor will hand them a survey packet including the questionnaire and a self-addressed stamped envelope].

If **“NO”** (have not previously agreed to participate and there is more than one adult in the group) then, *Thank you! We can only have one adult respondent per group. Whose birthday is next?* [wait for response]. *You'll be our respondent* [hand respondent packet; point to stamp]. *Here's the questionnaire. You can mail it back in the same envelope. We need your address to send you a replacement if we don't hear from you in two weeks* [hand address card], *and I have a few quick questions.* [The surveyor will ask them to start the process by answering the non-response bias questions (listed in item 9e) after they have completed the address card. The responses will be recorded in spaces provided on the survey log and non-response bias form. The surveyor will hand them a survey packet including the questionnaire and a self-addressed stamped envelope].

➔If NO- (soft refusal) then,

“No problem. Instead, I have a few quick questions I'd like to ask you now that would really help the park.” [The surveyor will record responses in spaces provided on the tracking sheet and then thank them for their time]

➔If NO- (hard refusal) – *“No problem. Thank you for your time.”*

All survey administrators will be trained on every aspect of on-site administration that will include: methods to avoid sampling bias, and techniques to handle all types of interview situations, especially safety of visitors and the administrator. Quality control will be ensured by monitoring interviewers in the field, and by checking their paperwork at the end of each survey day. In the event that on-site acceptance rates for participation in the visitor study are lower than the expected 80% acceptance rate during the sampling period, an experienced on-site field supervisor will provide additional training and support for the survey administration process, including:

- Ensuring that survey administration protocols are being followed properly,
- Recommending the adjustment of the specific bounds of the survey administration area to better capture flows of visitors,
- Recommending the reduction of the time interval.

(D) Expected Response Rate/Confidence Level:

Approximately 1,125 visitors will be contacted for this collection (375 contacts at each sampling location). In 2016, Resource System Group, Inc. (RSG) conducted similar studies across 15 units of the National Park System. Using similar prescribed sampling methods for on-site recruitment for mail-back surveys we are expecting that 80% (n=900) of the visitors contacted will agree to take a survey packet. Based on these past studies and the characteristics of Wind Cave National Park, we expect a cooperation rate of at least 80% and an overall response rate of at least 50%² for this collection.

² Cooperation rate is the proportion of onsite acceptances to total onsite contacts. Response rate is the proportion of completed survey questionnaires to total onsite contacts.

Table 1. Expected Cooperation Rate

Intercept Location	Initial Contacts	Cooperation (80%)	Non-respondents (20%)	Non-respondents	
				Non-response survey (80%)	Hard Refusals (20%)
North Entrance	375	300	75	60	15
South Entrance	375	300	75	60	15
West Entrance	375	300	75	60	15
Total	1,125	900	225	180	45

The target number of 900 questionnaires (n= 300 per intercept location) will be distributed to ensure that an adequate sample size. This sample size will be sufficient to generate 95% confidence that the survey findings will be accurate to approximately 5 percentage points for the overall sample (based on the formula where confidence level = $1 \div \sqrt{N}$, where N = target number of surveys completed). Given an assumed onsite cooperation rate of 80% (yielding a target number of 900 distributed questionnaires) and an assumed response rate of 50% for returned, completed questionnaires, the total number of visitor contacts will be 1,125 visitors to yield at least 450 completed, returned questionnaires for analysis.

Table 2. Expected return rate of the mail back survey

	Initial Contacts	Initial Acceptance	Returned Questionnaires 50%	Non-respondents 50%
All on-site visitors	1,125	900	450	450

(E) Strategies for dealing with potential non-response bias:

During the initial contact, the interviewer will ask each visitor group four questions taken from the survey. These questions will be used in a non-response bias analysis.

1. *How many adults, 18 and older, and children are in your personal group?*
2. *On this visit to Wind Cave National Park, did you participate in a cave tour?*
3. *On this trip, how much total time did you spend within Wind Cave National Park?*
4. *What is your state of residence (if you live in the US) or country of residence (if you do not live in the US)?*

All Responses will be recorded on the survey log and non-response bias form for every survey contact, except “hard refusals” (those who refuse to participate in the study and refuse to answer the non-response bias questions).

Responses from visitors who agree to participate onsite will be compared with the answers from those who did not agree to participate. This method will also serve as the non-response bias check for visitors accepting a survey packet, but not returning the completed questionnaire. Those who do not respond will be tracked via their Survey Code and identified as non-respondents. The responses to the on-site non-respondent questions for this group will be compared

with responses of visitors who return the questionnaire. Results of the non-response bias check will be reported and any implications for applicability of survey results to generalizations about the study population will be discussed.

(F) Description of any pre-testing and peer review of the methods and/or instrument:

All of the questions in this survey are from the currently approved NPS Pool of Known Questions (OMB 1024-0224; Revised: October 2015). These questions have been used in other studies completed by RSG, where the clarity of survey questions and understanding from respondents has been demonstrated. Variations of these questions have been reviewed by NPS managers, and PhD-level and MS-level NPS survey research consultants at RSG.

BURDEN ESTIMATES:

The total responded burden for this collection estimated is to be 198 hours. We have estimated respondent burden as follows:

- ❖ On-site contact – (Instructions/Address Card/Non-Response Bias Check): 45 hours
The initial contact will take about 1-minute to determine eligibility and acceptance of the invitation to participate. An additional two minutes will be needed to provide instructions, conduct the non-response bias check and complete the address card (900 respondents x 3 minutes =45 hours)
- ❖ On-site Non-response bias check (non-respondents): 3 hours
One minute will used to conduct the non-response bias check with all non-respondents that do not provide hard refusals (180 respondents x 1 minute = 3 hours). For the remaining 4% (n=45) that completely refuse to participate, no additional burden will be calculated; however, the surveyor will record any reason for refusal and the observational data.
- ❖ Visitor mail-back survey: 150 hours
It is estimated that it will take an average of 20 minutes to complete and return the mail-back questionnaire (450 respondents x 20 minutes -= 150 hours).

Table 3. Burden Estimates

Category	Responses	Completion Time * (minutes)	Burden Hours
On-site Contacts			
Initial contact : <i>Instructions/Address Card/Non-Response Check</i>	900	3	45
Non-response check: <i>Non-respondents</i>	180	1	3
Returned/Completed Mail back Surveys	450	20	150
Total burden requested under this ICR:		Contact time added to completion time	198

REPORTING PLAN:

The study results will be presented in an internal report for park managers. Results of statistical analyses and summary statistics will be compiled (e.g. response frequencies, measures of central tendency, correlations, Chi-square, analysis of variance, factor analysis, and scale reliability analysis, as appropriate). Final reporting will be delivered to park managers in hard copy and electronic formats, and posted as a Natural Resource Data Series in the NPS Data Store (<https://irma.nps.gov/DataStore/Reference/Profile/>) as required by the NPS Programmatic Review Process.

Reference:

Dillman, D. A., Smyth, J. D., & Christian, L.M. (2014). *Internet, Mail, and Mixed-mode surveys: The tailored design method*, 3rd Edition, Hoboken NJ: John Wiley & Sons, Inc.

NOTICES

Privacy Act Statement

General: This information is provided pursuant to Public Law 93-579 (Privacy Act of 1974), December 21, 1984, for individuals completing this form.

Authority: National Park Service Research mandate (54 USC 100702)

Purpose and Uses: This information will be used by The NPS Information Collections Coordinator to ensure appropriate documentation of information collections conducted in areas managed by or that are sponsored by the National Park Service.

Effects of Nondisclosure: Providing information is mandatory to submit Information Collection Requests to Programmatic Review Process.

Paperwork Reduction Act Statement

We are collecting this information subject to the Paperwork Reduction Act (44 U.S.C. 3501) and is authorized by the National Park Service Research mandate (54 USC 100702). This information will be used by The NPS Information Collections Coordinator to ensure appropriate documentation of information collections conducted in areas managed by or that are sponsored by the National Park Service. All parts of the form must be completed in order for your request to be considered. We may not conduct or sponsor and you are not required to respond to, this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number. OMB has reviewed and approved The National Park Service Programmatic Review Process and assigned OMB Control Number 1024-0224.

Estimated Burden Statement

Public Reporting burden for this form is estimated to average 60 minutes per collection, including the time it takes for reviewing instructions, gathering information and completing and reviewing the form. This time does not include the editorial time required to finalize the submission. Comments regarding this burden estimate or any aspect of this form should be sent to the Information Collection Clearance Coordinator, National Park Service, 1201 Oakridge Dr., Fort Collins, CO 80525.