



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: 8-1-2016

Project Title: Visitor use surveys at Arches National Park and Glen Canyon National Recreation Area

Abstract (not to exceed 150 words)

This submission contains two separate collections. Mail back questionnaires will be used to collect information from visitors at Arches National Park (ARCH) and Glen Canyon National Recreation Area (GLCA). Both NPS managed areas are in the process of reviewing and updating their Long Range Interpretive and Management Plans. The most recent comprehensive visitor surveys for both areas are more than 10 years old and the data is considered out of date since then visitation patterns have increased and changed significantly. Due to high visitation, congestion and crowding the impact public's enjoyment is having an impact on park resources ARCH is in the process of planning for major road construction, and GLCA is planning for facilities/services that would help reduce conflicts, enhance visitor experience while protecting the park resources. To that end the Resource Systems Group, Inc.(RSG) and Washington State University will collaborate on behalf of the National Park Service to conduct survey designed to help inform management decision at the parks concerning potential issues related to visitor use, especially related to crowding and recreational behaviors.

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Project Information

Where will the collection take place? (Name of NPS Site) Arches National Park (ARCH)
Glen Canyon Recreation Area (GLCA)

Sampling Period	ARCH	Start Date: 9/10/2016	End Date: 9/18/2016
	GLCA	Start Date: 10/8/2016	End Date: 10/16/2016

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.

The last comprehensive surveys at Arches National Park and Glen Canyon NRA (GLCA) were conducted in 2003 and 2007 respectively. While both studies offered good baseline data, new studies are needed to fill knowledge gaps and provide updated information about visitor's experiences, preference of services and opinions on park management. Since their most recent surveys visitation levels at both sites have increased and park managers report that areas in the parks are facing resource issues, crowding, and multiple-use conflicts creating a need for additional services and remediation throughout the park. The parks are in the process of updating management plan for facilities/services and developing policies that would help reduce conflicts and enhance visitor experience while protecting the park resources. This comprehensive visitor survey is needed to:

- obtain update visitor demographics
- obtain information related visitor experience and preferences
- measure perceived visitor use impact on resources and public enjoyment

This information is crucial to the planning process to improve services and facilities that the park. The study findings will be used to:

- Provide input into the transportation planning process regarding ways to reduce crowding and congestion in the park
- Design interpretive and education programs to match visitor interests and needs in different seasons
- Design future visitor facilities or renovate existing facilities
- Evaluate visitor behavior and potential impacts on natural and cultural resources in the park

- Gain an understanding of visitor’s expectations and recreation use and visitation patterns

Data will provide park managers with requisite knowledge to understand how well current park services and programs meet visitors’ needs.

Survey Methodology

(b) Respondent Universe:

The respondent universe for this collection will be all recreational visitors, age 18 and older, who visit ARCH and GRCA park during the study periods.

Table 1: Sample Locations

Park	Sample Period	Intercept Location
ARCH	9/10-18/2016	<ul style="list-style-type: none"> • Entrance station • Fiery Furnace trailhead
GRCA	10/8-16/2016	<ul style="list-style-type: none"> • Lone Rock • Wahweap • South Entrance, • Carl Hayden Visitor Center • Horseshoe Bend • Lee’s Ferry • Escalante Visitor Center • Bullfrog Marina Entrance • Hite Overlook.

Sampling Plan/Procedures:

A systematic sample of all visitors (at all locations listed in table 1 above) will be contacted by trained within the parks during the survey period. The survey design and sampling plan for this collection visitor studies is based upon a similar method applied system-wide for Social Economic Monitoring (SEM) survey and previous versions of the Visitor Service Project surveys.

The sampling will be based on the 2015 visitation statistics. We will intercept visitors at a 5 to 10 minute intervals. When each visitor group is stopped and asked to participate we will determine acceptance or refusal. If they accept the person with the nearest birthday from the group will be selected, a questionnaire and reply business mail envelop for returning the questionnaire will be distributed to that person. Contact information for follow up purpose and information used for non-response bias checking will be recorded using a script as described in the Instrument Administration section below. If the visitor refuses, information used for non-response bias testing will be recorded as described in the section below.

Each interviewer will be instructed to contact visitors at a 5-10minute interval at each of the park locations. For every two hours of survey distribution a half hour counting period will be performed. During the counting period, visitors will not be contacted. The count data will be used for weighting the survey results if needed. The actual interval used will be recorded on the survey log by interviewers. The Interviewer will be trained on every aspect of on-site surveying including: using sampling intervals, avoiding sampling bias, and how to handle all types of interviewing situations, especially safety of the visitors and the interviewers. Quality control will be ensured by monitoring interviewers in the field, and by checking their paperwork at the end of each survey day.

(c) Instrument Administration:

The initial contact with visitors will be used to explain the study and determine if visitors are interested in

participating. This should take approximately 1 minute. All individuals asked to participate in the study will be asked the non-response bias questions to collect information that will be used in the final analysis (see item 9e below). Visitors that refuse to participate will be asked if they would be willing to take two minutes to respond to the non-response bias questions. The number of refusals will be recorded and used to calculate the overall response rate for the collection.

Visitors selected for participation in the survey will be read the following script:

“Hello, my name is _____. I am conducting a survey for the National Park Service to better understand your opinions about this park's programs and services. Your participation is voluntary and all responses will be kept anonymous. Would you be willing to take a questionnaire and mail it back to us using the self-addressed envelope?”

→If **YES** – then ask, “has any member of your group been asked to participate in this survey before?”

If **“YES”** (already asked to participate) then, *“Thank you for agreeing to participate in this study we hope that you will return the questionnaire soon. Have a great day.”*

If **“NO”** (have not been previously asked to participate) then, *“Thank you for agreeing to participate. Who in your group is at least 18 years old and has the next birthday? [The surveyor will ask them to start the process by answering the non-response bias questions (listed below). The responses will be recorded in spaces provided on the tracking sheet. The surveyor will hand them a survey packet including the questionnaire and a self-addressed stamp envelope].*

→If **NO-** (soft refusal) - ask them if they would be willing to answer the non-response bias questions (listed below) and then thank them for their time. [The surveyor will record responses in spaces provided on the tracking sheet].

→If **NO-** (hard refusal) - end the contact and thank them for their time.

Once the visitor has agreed to participate in the study, we will ask them to provide or personally record their name, address, and phone number or email address on the survey tracking sheet – this information will only be used to follow-up with all non-respondents. At the end of the on-site sampling period, all visitors accepting a survey packet on-site will be mailed a thank you/reminder postcard within 11 working days. A reminder letter with a stamped, addressed replacement questionnaire will be sent to non-respondents 21 working days after the end of the survey period. Once the data collection is complete, all hard copies of contact information will be destroyed by shredding and deleting any electronic files.

	Date
Thank you postcard (send to everyone)	within 11 working days of initial contact
Replacement mailing with reminder letter (send to non-respondent only)	21 working days after the end of the survey period

(d) Expected Response Rate/Confidence Levels:

The same methodology for this collection has been applied in similar studies at other NPS site with similar resources or in the same geographical area and based on the data of the survey at ARCH in 2003 and at GLCA in 2007.

- Arches National Park at 73% (n=652) response rate (August 10-18, 2003)
- Glen Canyon National Recreation Area (summer) 59% (n=1,175) response rate (July 14-20, 2007)
- Glen Canyon National Recreation Area (spring) at 64% (n=968) response rate (May 2-8, 2007)

A total of 2,092 visitors will be contacted during the sampling periods (ARCH n=924 and GLCA n=1,168). We estimate that 1,925 (92%) visitors will agree on-site to participate in the survey. The number of refusals will be recorded and reported in a survey log, and will be used in calculating the response rate. Among which 404 visitors at ARCH (44%) and 591 visitors at GLCA (55%) are expected to complete and return the survey by mail. This response rate was estimated based on surveys result of similar NPS units in the area as cited in section b. Based on the survey sample size, there will be 95% confidence that the day-use survey findings will be accurate to within 4 to 6 percentage points.

Location	Number of Initial Contacts	Expected Response Rate	On-site acceptance	Expected Return Rate	Expected Number of Completed Surveys	Confidence Level
ARCH	924	92%	850	44%	374	96
GLCA	1,168	92%	1,075	55%	591	94
TOTAL	0		0		0	

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

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

- 1) Respondent's gender (observe)
- 2) What is your group size? # of children under 18 and # of adults 18 or older
- 3) What is your group type (alone, family, friends, family and friends, other)
- 4) What is your trip length? Number of days if overnight, number of hours if day trip
- 5) What is your state or country (if international) of resident?

Responses will be recorded on a log for every survey contact. Results of the non-response bias check will be reported and any implications for planning and management will be discussed.

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

All questions included in this survey questionnaire appear in the approved NPS Pool of Known Questions (OMB Control Number 1024-0224 Expiration Date 5-31-2019). Additional questions in the questionnaire were either previously used in 2007 survey or from the NPS Socioeconomic Monitoring pilot survey (1024-0224) instrument implemented in 2016 summer. All questions have been tested via these previous survey efforts. The questionnaires were reviewed by park staff and Social Science Program research coordinator.

Burden Estimates

Overall, we plan to approach at least 2,092 individuals during the sampling periods at both parks. . Among which, we plan to obtain verbal agreement to participate in the survey from 1,925 individuals. We expect to receive total of 965 completed surveys for this collection.

We are anticipating that the initial contact time will be three minutes per person (1,925 x 3 minutes = 96 hours). This includes the time explain the study and to obtain verbal agreement or refusal to participate and to ask the non-response bias questions. We expect that 1,087 visitors will either decline onsite or will not return the questionnaire.

Based upon our expected response rates, we expect to receive total of 965 completed surveys for this collection, with that, an additional 25 minutes will be required to complete and return the questionnaire by mail (965 responses x 25 minutes = 402 hours). The total burden for this collection is estimated to be 498 annual hours.

Estimated Total Number		Estimation of Time (minutes)		Estimation of Burden (hours)	
All Initial Contacts (includes On-site Refusal/ nonresponse)	1,925	Initial Contacts (includes On-site Refusal/ nonresponse)	3	Initial Contacts (includes On-site Refusal/ nonresponse)	96
Completed Responses	965	To complete response	25	To complete response	402
Total				Total	498

Reporting Plan

The study results will be presented in an internal agency report for the NPS Social Science Program and park managers, and at two meetings with NPS Social Science Program staff and other decision-makers. Response frequencies will be tabulated and measures of central tendency computed (e.g., mean, median, mode, as appropriate). The report will be archived with the NPS Social Science Program for inclusion in the Social Science Studies Collection as required by the NSP Programmatic Approval Process; and will also be posted on the Social and Economic Sciences Research Center website at: <https://sesrc.wsu.edu/national-park-service-projects/>. Hard copies will be available upon request.