



## Programmatic 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.*

**Do not revise any part of this form**

<b>General Information</b>	
<b>Project Title:</b> Sage Creek Campground Use Study at Badlands National Park	<b>Submission Date:</b> 06/09/2020
<b>Abstract</b> (not to exceed 150 words)	
<p>Sage Creek Campground, located within Badlands National Park, has long been known for providing a primitive camping experience to visitors. However, the campground has gained exponential popularity in recent years, and overcrowding and increased visitor conflict is impacting park resources and visitors' experiences. While there are 25 designated campsites, camping is on a first-come, first-served basis and the campground is not continuously monitored or patrolled. As visitor numbers have increased, it has become common for campers to double or triple up on sites, camp outside of established areas, or to park off- road. This collection will use an on-site visitor questionnaire to provide BADL managers with the necessary information on visitor use patterns and experiences to inform potential campground improvements and management actions that could enhance visitors' experiences and resource conditions at Sage Creek Campground</p>	
<b>Principal Investigator Contact Information</b>	
<b>Name:</b> Steve Lawson	<b>Title:</b> Senior Director, Public Lands Planning and Management
<b>Affiliation:</b> Resource Systems Group, Inc. (RSG)	<b>Address:</b> 55 Railroad Row, White River Junction, VT 05001
<b>Phone:</b> 802-295-4999	<b>Email:</b> steve.lawson@rsginc.com
<b>Park or Program Liaison Contact Information</b>	
<b>Name:</b> Eddie Childers	<b>Title:</b> Wildlife Biologist
<b>Park:</b> Badlands National Park	<b>Address:</b> 25216 Ben Reifel Road, Interior, SD 57750
<b>Phone:</b> 605-433-5263	<b>Email:</b> eddie_childers@nps.gov
<b>Project Information</b>	
<b>Where will the collection take place? (Name of NPS Site)</b> Badlands National Park (BADL)	
<b>Sampling Period Start Date:</b> August 29, 2020	<b>Sampling Period End Date:</b> September 13, 2020

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

<input type="checkbox"/> Mail-Back Questionnaire	<input type="checkbox"/> Face-to-Face Interview	<input type="checkbox"/> Focus Groups
<input checked="" type="checkbox"/> On-Site Questionnaire	<input type="checkbox"/> Telephone Survey	<input type="checkbox"/> 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.*

Sage Creek Campground is a primitive campground in Badlands National Park that is frequented by wildlife and features 25 campsites, a separate campsite for visitors with horses, and two vault toilets. Sage Creek Campground also serves as a gateway to the Badlands Wilderness Area. The campground attracts a wide variety of visitors, including RV users, trailer users, and tent campers, and allows visitors to camp without a camping fee on a first-come, first-served basis. In the past five years, the popularity of the campground has increased exponentially, causing concern about potential impacts to natural resources and the quality of visitors' camping experiences. In addition, the number and mix of camper types has led to visitor conflict and law enforcement issues, which can be difficult to manage due to the lack of a constant law enforcement presence or campground host to monitor and manage the situation. While the park has recently noted high levels of visitor use and increased conflict, no formal research has been conducted at Sage Creek Campground to collect information about campers' use patterns and experiences and inform decisions about visitor use planning and management there.

An on-site visitor survey will be conducted to collect information about campers' motivations and expectations, use patterns, perceptions of potential management actions, and satisfaction with their visit to Sage Creek Campground. In particular, the data from the survey will inform park managers about visitor perceptions and experiences of crowding and its impacts, disruptive or unsanctioned behavior from other campers, camper interactions with wildlife, and conflicts that result from mixed-use activity at the campground (e.g., tent campers, RV campers, equestrian campers, etc.). In addition, the survey will provide information about visitor motivations for camping at the campground, including opinions on the importance of the campground as a free, primitive campground that provides easy access to Wilderness. Managers will then be able to weigh that information and incorporate it into longer-term visitor use management decisions for Sage Creek Campground.

**Survey Methodology**  
**a. Respondent Universe**

Based upon NPS 2019 Visitor Use Statistics, August and September were the second and fourth busiest months, respectively, for BADL in 2019, with more than 458,000 recreational visitors total. The respondent universe for this collection will be all recreational visitors, age 18 or older, who camp at Sage Creek Campground during the sampling period.

**b. Sampling Plan/Procedures:**

The on-site visitor questionnaires will be administered for a total of 14 days. Throughout the duration of the study period, the sampling days will be stratified equally across weekdays and weekend days such that sampling will occur on seven weekdays and seven weekend days or holidays (Labor Day) (Table 1). By including an equal number of weekend days/holidays and weekdays in the sampling period, this study will capture mixed levels of use throughout the sampling period while also ensuring that the intensive use associated with holiday weekends and the end of the peak season is represented.

**Table 1. Sampling Days Per Site - On-site Visitor Questionnaire**

Location	August/September		TOTAL
	Week day	Weekend or holiday day	
Sage Creek Campground	7	7	14

The target number of completed questionnaires is 280. This target is intended to ensure that an adequate sample will be generated so that there will be 95% confidence that the survey findings will be accurate to approximately 6 percentage points (based on the formula where confidence level =  $1 \div \sqrt{N}$ , where N = target distribution number). It is anticipated that park conditions during the sampling period will provide the opportunity to reach this target. As noted above, NPS 2019 Visitor Use Statistics indicate that BADL sees more than 458,000 recreational visitors between August and September, and park managers are concerned about crowding levels at Sage Creek Campground during this time period, which tends to see doubling and tripling up on campsites. Given this target number of completed questionnaires, and an assumed acceptance rate of 80% (See Section D: Expected Response Rate/Confidence Interval for more detail), the total number of visitor contacts will be 350 visitors groups (Table 2).

**Table 2. Number of Visitors Contacted, On-site Visitor Questionnaire**

Location	August/September		TOTAL
	Week day	Weekend days and holidays	
Sage Creek Campground	175	175	350

Visitor groups will be approached to participate in the survey during a 14-day sampling period. The on-site visitor questionnaire will be administered to visitor groups camping at Sage Creek Campground by a survey administrator

following a systematic, roving circuit intended to contact every new visitor group at the campground. A “first-after-last-completed” sampling approach will be used to contact visitor groups as the survey administrator follows the campground circuit. Upon completion of a contact (whether the contacted visitor group agrees to participate or not), the very next visitor group along the circuit route will be contacted and asked to participate. The “first-after-last-completed” process will continue until the systematic, roving circuit is completed. Two roving circuits will be conducted on each sampling day, with one in the late morning and one in the early evening, in order to coincide with peak periods of campground occupancy and visitor availability.

**Table 2. Number of Visitors Contacted During 14-day Sampling Period**

	<b>M</b>	<b>T</b>	<b>W</b>	<b>TH</b>	<b>F</b>	<b>S</b>	<b>S</b>	<b>TOTAL</b>
<b>Weekend 1 (August 29 – 30)</b>	-	-	-	-	-	30	30	60
<b>Week 2 (August 31 – September 4)</b>	20	20	20	OFF	20	-	-	80
<b>Weekend 2 (September 5 – 6)</b>	-	-	-	-	-	30	30	60
<b>Holiday (September 7)</b>	30	-	-	-	-	-	-	30
<b>Week 3 (September 8 – 13)</b>	-	20	OFF	20	20	-	-	60
<b>Weekend 3</b>	-	-	-	-	-	30	30	60
<b>Total</b>	50	40	20	20	40	90	90	350

We anticipate that 80% of the visitor contacted will agree to participate in the survey. This response rate is consistent with response rates for similar surveys conducted by RSG in national park units around the country. An experienced field supervisor will track survey response rates daily and will provide additional training and support for the survey interviewer if response rates are lower than anticipated.

**Table 3. Number of Participants during 14-day Sampling Period**

	<b>M</b>	<b>T</b>	<b>W</b>	<b>TH</b>	<b>F</b>	<b>S</b>	<b>S</b>	<b>TOTAL</b>
<b>Weekend 1 (August 29 – 30)</b>	-	-	-	-	-	24	24	48
<b>Week 2 (August 31 – September 4)</b>	16	16	16	OFF	16	--	--	64
<b>Weekend 2 (September 5 – 6)</b>	-	-	-	-	-	24	24	48
<b>Holiday (September 7)</b>	24	-	-	-	-	-	-	24
<b>Week 3 (September 8 – 13)</b>	-	16	OFF	16	16	-	-	48
<b>Weekend 3</b>	-	-	-	-	-	24	24	48
<b>Total</b>	40	32	16	16	32	72	72	280

### c. Instrument Administration

The visitor questionnaire will be administered and completed on-site. Camping groups will be approached to complete the survey at their campsite as the survey administrator completes a systematic roving circuit through the campground. The initial contact with all camping groups will be used to explain the on-site visitor study and determine camping groups' interest in participating. When a camping group expresses interest in the study, the survey administrator will ask the adult group member (over 18 years old) with the next birthday to participate in the study. The initial contact is not expected to take more than one minute.

If an approached camping group refuses to participate in the study, the survey administrator will record the group as a refusal. Groups who refuse to participate will be asked to answer four pre-selected questions from the questionnaire and thanked for their time. The brief interview, which will last approximately three minutes, will be used to estimate non-response bias. Responses from participants will be compared to responses from camping groups refusing to participate in the study on the four non-response bias questions.

#### On-site Visitor Questionnaire

The identified respondent will be given a questionnaire, provided instructions, and will be informed that the questionnaire is designed to take no more than 12 minutes to complete and that no personally identifiable information will be collected. The respondents will be asked to complete and return the questionnaire to the survey administrators or leave it in a survey drop-box before leaving the campground. The example on-site intercept script is as follows:

*"Hello, my name is \_\_\_\_\_. I am conducting a survey for Badlands National Park to help managers understand your experience at Sage Creek Campground. Your participation is voluntary, and all responses will be kept anonymous. Would you be willing to complete a questionnaire about your experience at Sage Creek Campground?"*

*→ If YES – then ask (if not obvious), "Is there at least one adult group member at least 18 years of age or older?"*

*→ If NO (no adult group members) – then say, "Ok. Thank you for your time and have a great day."*

*→ If YES – then ask, "Has any member of your group already participated in the survey?"*

*→ If YES (previously agreed to participate) then, "Thank you for participating in this study. Have a great day."*

*→ If NO (have not previously participated) then, "Thank you for agreeing to participate."*

*"The questionnaire should not take more than 12 minutes to complete. Of the adults in your group, whose birthday is next?" (Identify visitor and direct next portion of contact to this visitor.) "Great, I'd like to ask you to complete this questionnaire after you've camped for at least one night (hand the questionnaire and writing utensil to the participant). After you've completed the questionnaire, please return it to a survey administrator or drop it in the drop-box (identify and point to drop-box location). Thank you for your help! Have a great day."*

→ If NO – (soft refusal) then, “That’s fine. We won’t bother you with a questionnaire today. But would you be willing to take just one more minute and answer a few brief questions for me now, to help us be sure our sample is reliable?”

→ If YES – [The survey administrator will ask the non-response bias questions. The responses will be recorded by the survey administrator in spaces provided on the survey log and non-response bias questions.]

→ If NO – (hard refusal) then, “Thank you for your time. Have a great day.”

All survey administrators will be trained on every aspect of on-site surveying, including survey administration, avoiding sampling bias, and handling 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 sampling day. In the event that survey response rates are observed to be lower than expected during the sampling period, an experienced supervisor will provide additional training and support for the survey administration process, including working with survey administrators to ensure that survey administration protocols are being followed properly, and recommending the adjustment of the survey administration timing to better capture all camping groups. All survey administrators will adhere to park protocols related to social-distancing.

**d. Expected Response Rate/Confidence Levels**

Approximately 350 visitors will be contacted for the on-site visitor questionnaire component of the study. Based upon similar studies conducted by Resource Systems Group, Inc. (RSG) for the National Park Service (NPS), using similar prescribed sampling methods, we propose an on-site acceptance rate of at least 80% for this collection. We anticipate we will receive 280 completed surveys from all visitors contacted. We anticipate that one survey interviewer will be sufficient for capturing use at the campground; the survey interviewer may return to groups that were not available during the initial rove at a later time to ensure that all camping groups have the opportunity to take the survey.

The number of refusals will be recorded and used in calculating the response rate. Based on the expected number of responses, there will be 95% confidence that the survey findings will be accurate to approximately 6 percentage points.

Location	Number of Initial Contacts	Expected Response Rate	Expected Number of Responses	Margin of Error +/-%	Confidence Level
Sage Creek Campground	350	80%	280	6%	95%
<b>TOTAL</b>	350	80%	280	6%	95%

**e. Strategies for dealing with potential non-response bias**

Responses to the non-response bias questions will be recorded for every initial contact who refuses to participate in the study, except for “hard refusals” (refuse to participate in the study, and refuse to answer the non-response bias questions). 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. Observational data (group size, gender, and time of day) will be recorded for all groups, including “hard refusals.” The number of refusals will be recorded and used to calculate the overall response rate for the collection at the park.

The following four questions will be used in a non-response bias analysis for the on-site questionnaire. These questions will be asked to visitors who refuse to participate when initially contacted and do not give a “hard refusal” (refuse to participate in the study, and refuse to answer the non-response bias questions). Responses to these questions will be recorded by the survey administrator on the survey contact log form.

1. *Have you camped at Sage Creek Campground before? (Yes/No)*
2. *How did you first hear about Sage Creek Campground?*
  - a. *Social media*
  - b. *Badlands National Park website*
  - c. *Word of mouth*
  - d. *Other*
3. *Which of the following best describes why you are camping at Sage Creek Campground rather than another campground on this trip?*
  - a. *It is a “free” camping option in Badlands National Park*
  - b. *It provides easy access to the Sage Creek Wilderness*
  - c. *It allows me to bring horses and other pack animals*
  - d. *I like the remote setting*
  - e. *I wanted to camp at Cedar Pass Campground, but that campground was full*
  - f. *Other reason \_\_\_\_\_*
4. *What is your state or country of residence (if not US)?*

**f. Description of any pre-testing and peer review of the methods and/or instrument (recommended)**

All of the survey questions are taken from the currently approved NPS Pool of Known Questions (1024-0224). Similar questions have been used in other studies completed by RSG, where question clarity and understanding from respondents has been demonstrated. These questions have been reviewed by NPS managers and PhD-and MS-level survey research consultants at RSG.

Pretesting of the on-site visitor questionnaire occurred with four administrative staff in RSG’s White River Junction office, who do not possess experience with or knowledge of survey research or park management. The respondents commented that the wording of the questions was clear, and review of their responses on their questionnaires reflected their understanding. Questionnaire completion times were observed and are incorporated into the burden estimate below.

**Burden Estimates**

The combined total burden for this collection is estimated to be 79 hours. We have estimated respondent burden for the on-site questionnaire as follows:

- ❖ On-site questionnaire and non-response bias check (completed survey): 56 hours.  
The initial contact and time to complete and return the on-site questionnaire is estimated to be 13 minutes
  
- ❖ Non-response bias check (non-respondents that are not hard refusals): 2.8 hours  
After the initial contact an additional three minutes will be used to conduct the non-response bias check with all non-respondents (n=56).

It is expected that the remaining 14 visitors (approximately 20% of non-respondents) will completely refuse to participate and for those individuals there will be no calculation of burden, however, the surveyor will record any reason for refusal and the observational data listed above.

	Estimated Total Number	Estimation of Time to Complete (minutes)	Estimation of Burden to Complete (hours)
<b>Responses</b>	280	13	61
<b>On-site Refusal/nonresponse</b>	56	3	3
	336		64
<b>Total</b>			



**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 electronic format, 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.