



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: 05/20/2015

Project Title: Great Sand Dunes National Park Backcountry Visitor Use Study

Abstract (not to exceed 150 words)

The purpose of this collection is to provide Great Sand Dunes National Park and Preserve (GRSA) with data on visitor-use patterns and experience dimensions of the park's backcountry areas. Onsite questionnaires will be used to collect information from all recreational users of the park's backcountry, including day and overnight visitors, and hunting and non-hunting visitors. Four questionnaires will be used to collect information about backcountry trip itineraries, experience measures, and visitor preferences for potential management actions. This study targets peak non-hunting backcountry use in July and peak hunting backcountry use in October, and will be used to inform upcoming backcountry planning and management.

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Project Information

Where will the collection take place? (Name of NPS Site) | Great Sand Dunes National Park and Preserve

Sampling Period | Start Date: June 15, 2015 | End Date: December 1, 2015

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. 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.

Management Justification: The National Park Service is responsible for managing 150,000 acres within the boundaries Great Sand Dunes National Park and Preserve (GRSA) and nearly 110,000 of park is designated as backcountry and designated/proposed wilderness areas. Portions of this land were publicly accessible and administered by the U.S. Forest Service, the other parcels were owned by private land holders. Due to the various jurisdictional boundaries and historic land management practices, GRSA managers seek to understand the past and current uses by both hunters and non-hunters of the backcountry resources within the National Park Service jurisdiction.

To-date the park has not collected information concerning the recreational uses of the park's backcountry, or the lands newly acquired within the last several years. Additionally, the park also does not have a backcountry permitting process in place that could otherwise give feedback on visitation rates and uses. Thus, primarily anecdotal information about visitor use in the park's backcountry is available for possible decision making strategies. This effort will systematically collect information from all recreational users in the backcountry areas of GRSA, required to provide managers with a view of the types of uses and users in these areas of the park.

The park has requested this collection of information because the key component to fully and effectively developing and ultimately implementing a backcountry management plan is to have baseline visitor-use data to base their decisions. .

This collection will be used to:

- Provide input into the park's planning processes (e.g., Backcountry Management Plan)
- Collect feedback from visitors about backcountry social and resource conditions
- Evaluate visitor behavior for potential impacts on natural and cultural resources

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- Provide information about the distribution of use across backcountry access points
 - Provide information about visitor expectations and perceptions of backcountry/wilderness experiences
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Survey Methodology

(a) Respondent Universe:

The respondent universe this collection will be as follows:

1. **Overnight, non-hunting recreational users** - All recreational visitors, age 18 and older, taking an overnight trip in the backcountry of GRSA during the July sampling period (hunting is not permitted by GRSA in July, correspondingly no hunting groups will be contacted during this sampling period).
2. **Day, non-hunting recreational users:** All recreational visitors, age 18 and older, taking a day trip in the backcountry of GRSA during the July sampling.
3. **Overnight, hunting recreational users:** All recreational visitors, age 18 and older, taking an overnight hunting trip in the backcountry of GRSA during the October sampling period (
4. **Day, hunting recreational hunters:** All recreational visitors, age 18 and older, taking a day hunting trip in the backcountry of GRSA during the October sampling period

(b) Sampling Plan/Procedures:

All visitor groups will be randomly selected as they exit one of the six trailheads (4 official entrances, 2 additional trailhead locations within the interior of GRSA) that represent the range of backcountry uses in the GRSA. Sampling will occur during two 7-day sampling periods. Sampling will occur during four weekend days and three weekdays during the peak non-hunting backcountry use period (mid-July) and peak hunting backcountry use period (mid-October). Each of the six locations will be sampled concurrently during each of the seven sampling days in the July and October sample periods.

On each sampling day, survey sampling will be conducted 8 hours per day, spanning morning, afternoon, and early evening hours. A screening question will be used to determine whether a visitor is an overnight user or a day user of GRSA backcountry (see surveyor script in section C below).

We plan to approach 400 visitors during each sampling period, with target contacts distributed as shown in the table below. The number of contacts and questionnaires administered to visitors will be tracked on a daily basis; if tracking information indicates that sampling goals are not being met for an intercept location, contingency plans will be developed with the park to conduct more intensive sampling at the location. This could include increasing the sampling interval, sampling staff, and/or sampling days to the location.

	Weekend days				Week days		
	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Non-Hunters							
Day (n=200)	28	29	28	29	28	29	29
Overnight (n=200)	29	28	29	28	29	28	29
Total	57	57	57	57	57	57	58
Hunters							
Day (n=200)	28	29	28	29	28	29	29
Overnight (n=200)	29	28	29	28	29	28	29
Total	57	57	57	57	57	57	58

Each surveyor will be instructed to contact the first exiting group after previous contact at each of the GRSA sampling locations, whether or not the contacted visitor group agrees to participate in the study; this

systematic sampling approach has the same properties as an interval-based sampling approach, but allows for greater sampling efficiency and is commonly used in applied research studies for its relative ease of application and statistical properties that approximate a simple random sampling approach (personal communication, Burke Grandjean, April 2015). Each surveyor will be trained on every aspect of onsite surveying including: using sampling intervals, avoiding sampling bias, and how to handle all types of interviewing situations, especially safety of the visitor and the interviewer. Quality control will be ensured by monitoring surveyors in the field, and by checking their paperwork at the end of each survey day.

(c) Instrument Administration:

When the sampling period begins, surveyors at each sampling location will approach the first visitor group exiting the study area and ask them to participate in the survey. The initial contact with visitor groups will be used to explain the study and determine if visitors are interested in participating. This should take approximately 1 minute per selected group. When a group is encountered, the surveyor will approach an adult in the group to request participation. The surveyors will record current time, group size, whether or not they agree to participate or even to answer the non-response bias questions on a survey log. Visitor groups that decline to participate in the study will be thanked for their consideration and asked to answer a few non-response bias questions (see section (e) below); answers will be recorded. The number of refusals will be recorded and used to calculate the overall response rate for the collection. A screening question will be asked to assure that participants will not be surveyed more than once.

Groups that agree to participate in the survey will be asked to identify the adult (18 years of age or older) in the group who will have the next birthday to serve as the respondent. That person will then be given a questionnaire to fill out and return on site, in the presence of the surveyor. When the surveyor has completed his/her contact with the group, the surveyor will ask the next visitor group exiting the study area to participate in the survey. The surveyor will answer any questions that arise as visitors fill out the questionnaire, and will collect the questionnaire upon completion. This process will continue throughout the sampling period.

Visitor groups who are contacted onsite will be read the following script:

"Hello, my name is _____. I am conducting a survey for the National Park Service to better understand your use of the backcountry areas of Great Sand Dunes National Park and Preserve. [October sampling period only: Were you hunting in GRSA on this trip? If "Yes" then continue the contact; if "No" then "Thank you for your time, we are only surveying hunting groups today. Have a great day".] Your participation is voluntary and all responses will be kept anonymous. Would you be willing to spend a few minutes to answer some important questions regarding your visit here? This will only take about 12 minutes."

→If YES - then ask, "have you or any member of your group already been asked to participate in this survey?"

If "YES" (previously agreed to participate) then, "Thank you for participating in this study, but you have already provided us with the information we need. Have a great day."

If "NO" (have not previously agreed to participate) then,
"Thank you for agreeing to participate. The results from this survey will help the National Park Service better understand visitor experiences, perceptions, and attitudes toward use and management of this park. First, are you finishing an overnight trip in the backcountry of Great Sand Dunes National Park and Preserve

today?

If “YES” surveyor will administer an **overnight version** of the survey.

If “NO” surveyor will administer the **day version** of the survey.

Next: “Who in your group (who is at least 18 years old) has the next birthday?”
[Surveyor will direct this individual to answer the questionnaire.]

Study participant will be instructed to complete the questionnaire onsite and address any questions to the surveyor.

➔If NO- (soft refusal) then, “That’s fine; we won’t ask you to complete the entire survey. But would you be willing to answer four short questions to help us be sure that the sample of visitors we survey represents the total visiting population?” [The surveyor will record responses in spaces provided on the tracking sheet and then thank them for their time].

➔If NO- (hard refusal) – “Thank you for your time. Have a great day.”

(d) Expected Response Rate/Confidence Levels:

A total of 800 visitors will be contacted to participate in the study – 400 during the July non-hunting sample period and 400 during the October hunting sample period. In 2002, a NPS Visitor Services Project conducted at GRSA using a 7-day sampling period. This survey experienced a 97% acceptance rate and a 76% return rate for a mailback survey. Based on the response rates of that VSP study we are anticipating that 76% of the visitors contacted (304 in July and 304 in October) for this study will agree to complete and return a survey instrument. It should be noted, although the proposed survey methods (on-site survey) versus the (mail back survey) method used in the 2002 VSP study are different, the survey instruments are of a similar length and style of the VSP instrument. Additionally, onsite backcountry visitor surveys of similar length and style administered by the Principal Investigator for a different project during the summer 2014 field season at three popular recreation areas in the same geographic area (Front Range of Colorado), generated response rates ranging from 53% to 81%; the highest response rates were at trailhead intercept locations like those proposed for this information collection, the lower response rates were at roadside intercept locations where visitors were intercepted while driving in their vehicles toward the exit of the study sites. Thus, the mid-point of the range from the other recent, similar study (75%) is likely a conservative estimate of expected response rate for this collection. The number of refusals will be recorded and reported, and will be used in calculating the response rate. Therefore, for the total study we anticipate 608 completed questionnaires and 192 refusals.

Based on the expected number of responses (n=304) per sampling period, there will be 95% confidence that the survey findings will be accurate to within 7 percentage points (Fowler, 1993). Thus, the anticipated number of responses will be adequate for bivariate comparisons between user groups and more sophisticated multivariate analysis, and results will be generalizable to the target study populations.

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

For visitor groups that provide a soft refusal for participation in the study, the surveyor will ask the following four questions that will be used in a non-response bias analysis.

1. On this trip, what type of group were you with?
 Alone Family Friends Family and friends Other (Please specify)

2. Did you and your personal group use a commercial guide and/or outfitter for this backcountry trip?
 Yes No

3. (For day users) About what time did you start this trip today?
 ----- Start Time of Trip

 (For overnight users) On this trip, how many nights did you spend in the backcountry of GRSA?
 ----- Number of Nights

4. Which trailhead did you use to start this trip into backcountry?
 ----- Name of Starting Trailhead

These responses will be recorded for all visitor groups providing a soft refusal. Results of the non-response bias check will be reported and any implications for interpreting the results will be discussed in the final report.

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

The survey questions are taken and adapted from the currently approved NPS Pool of Known Questions (OMB 1024-0224). The questionnaire format and many of the questions are similar to those used in similar recent backcountry surveys conducted in other National Park units such as Yosemite (Hall & Irizarry, 2013; Lawson et al., 2012), Great Smokey Mountain (Kiser & Lawson 2006), Haleakalā (Lawson et al., 2008), and Olympic (Manning et al., 2013). Variations of the questions have been reviewed by NPS managers and PhD-level and MS-level NPS survey research consultants at RSG.

Burden Estimates

For each group (Day Users-Hunters (n=200); Day Users-Non Hunters (n=200); Overnight Users-Hunters (n=200) and Overnight Users Non-Hunters (n=200) we anticipate that we will receive 128 soft refusals and that it will take 2 minutes per visitor approached to take the non-response survey. We expect that 64 people in the sample will completely refuse to participate in the study. Finally we based on previous results we believe that we will receive 608 completed responses.

The total annual burden for this collection is estimated to be approximately 140 hours. The estimation of burden is listed in the table below.

Estimated Total Number of:	
Initial Contacts	800
Soft Refusals	128
Hard Refusals	64
Respondents	608
	160
Total Contacts	0

Estimation of Time (minutes)	
Initial Contact	1
Non-Response questions	2
Contact Only	1
To complete survey	12

Estimation of Burden (hours)	
Initial Contact	13
Completed Survey	4
Soft Refusals	1
Hard Refusals	122
Total Burden Hours	140

Reporting Plan

The study results will be presented in an internal agency report for the NPS Social Science Program and park managers. 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. Hard copies will be provided to GRSA and WASO SSB. Findings will also be presented in-person at GRSA Headquarters, summarizing the results, lessons learned, and implications.

References:

Dillman, D. A., Smyth, J. D., & Christian, L.M. (2010). *Internet, Mail, and Mixed-mode surveys: The tailored design method*, 3rd Edition, Hoboken NJ: John Wiley & Sons, Inc.

Fowler, F.J. (1993). *Survey Research Methods*, 2nd Edition, Newbury Park, CA: SAGE Publications.