



## 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: 01-18-08**

### **PROJECT TITLE: Visitor's experience climbing in Grand Teton National Park**

#### **ABSTRACT:** (not to exceed 150 words)

Garnet Canyon one of the most highly visited climbing areas in Grand Teton National Park (GRTE). As overnight and day climbing use increases to this area, it is important to identify, understand, and monitor key components to the visitor experience. This study seeks to understand visitor experience climbing in Garnet Canyon, specifically visitor's motivations, expectations, and perceptions of crowding employing on-site visitor intercept surveys. On-site surveys will be conducted from July to August of 2018. All adults (aged 18 and older) climbing in the sampling area during the sampling period will be eligible to participate in the survey.

#### **PRINCIPAL INVESTIGATOR CONTACT INFORMATION:**

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**PROJECT INFORMATION:**

Where will the collection take place? Garnet Canyon in Grand Teton National Park

Sampling Period Start Date: July 1, 2018      Sampling Period End Date: August 31, 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: iPad tablet computer

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**SURVEY JUSTIFICATION:**

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*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.*

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Garnet Canyon is one of the most highly visited climbing areas in Grand Teton National Park (GRTE). It offers access to numerous climbing and mountaineering opportunities, including access to climbing routes on the iconic 13,775 ft Grand Teton. Both guided and private climbing parties climb in Garnet Canyon. There are two authorized climbing guide companies within the park, each with a high camp in Garnet Canyon for clients to stay during overnight or multi day trips in Garnet Canyon. One guiding company has a capacity of 21 people (clients and guides) per night in Garnet canyon, and the other has a capacity of 16 people (clients and guides) per night in Garnet Canyon. There are also 6 camping zones in the Garnet Canyon areas with a capacity of approximately 80 people per night for private parties. Both guiding companies also have limits on the number of one-day ascents of the Grand Teton they guide per climbing season. One company is limited to 50 climbs a year, while the other is limited to 10 climbs a year. There are no limits on the number of day-climbs for private parties anywhere in GRTE, including the Grand Teton.

Currently, there is little to no scientific understanding of visitor's climbing experience in Garnet Canyon of GRTE. Being one of the highest visited climbing areas within the park, it is important that park managers understand the motivations, expectations, and perceptions of crowding to ensure that visitors have the opportunity for high quality experiences. This study will help provide information about the differences between overnight and day climbers, as well as guided and private climbers. Additionally, one of the main roles of the social scientist at Grand Teton National Park is to study visitor use and experience, specifically in regards to climbing and boating concessionaries. As concessions management continues to make decisions about the climbing concession contracts, information

about the social impacts to the climbing experience in Garnet Canyon is imperative. As managers continue to plan for the future of climbing in Garnet Canyon, the information collected in the study will serve as a baseline of visitor experience for comparison for future studies. Being that little is currently known of the dimensions of visitor experience in Garnet Canyon, this study is exploratory in nature; not attempting to test a specific hypotheses or theory.

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**SURVEY METHODOLOGY**

**(A) Respondent Universe:**

For the past three years, the climbing concessions have taken more than 1,300 on overnight trips to climb the Grand Teton in July and August of each year. Additionally, a trail counter installed at the entrance of Garnet Canyon in 2017 indicates that more than 5,700 people entered Garnet Canyon in July and August of 2017. Based on a 2017 GPS-based study of visitors entering the Lupine Meadows trailhead (which leads to Garnet Canyon), approximately 44% of visitors accessing Garnet Canyon went to climbing areas. Therefore, it is estimated that there were approximately 2,500 visitors (44% of 5,700) accessing climbing areas in Garnet Canyon in 2017. The respondent universe will be all adults (18 years old and older) accessing climbs in Garnet Canyon and exiting the trail system near the canyon’s mouth from July 1 to August 31, 2018.

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**(B) Sampling Plan / Procedures:**

There is only one entrance/exit into or out of Garnet Canyon. Researchers will be stationed near the exit of Garnet Canyon to intercept visitors. From the exit of Garnet Canyon to the parking lot is three miles of trail that climbers must descend. There will be a total of 35 sampling days that will be stratified by day of the week and time. Participants will be surveyed as they exit the Garnet Canyon trail system at the end of their visit.

**Table 1. Example On-site Sampling Schedule**

Location	Sampling Days Per Site		
	July 2018	August 2018	TOTAL
Garnet Canyon	15	20	35

On the sampling days during the sampling period, it is estimated that a total of 360 visitor contacts will be made, or approximately 11 visitor contacts per sampling day. This is an appropriate approximation, as a 2015 survey of climbers in Garnet Canyon intercepted an average of 11 climbers on each sampling day during a similar sampling period (e.g. July and August 2015).

**Table 2. Estimated Number of Visitor Contacts during Sampling Period**

Location	Estimated Number of Visitor Contacts		
	July 2018	August 2018	TOTAL
Garnet Canyon	160	200	360

On each sampling day, two trained researchers will be stationed at one of the locations for six and a half hours between 12 p.m. and 6:30 p.m. Two researchers will be stationed to recruit a random sample of visitors as they exit the sampling locations. One visitor group will be intercepted by one researcher, and the other researcher will standby for safety purposes or to answer any non-participating visitor questions. If researchers are unable to meet their sampling quota for the month, which will be assessed mid-month each month, additional day(s) will be instated and the sampling procedures will continue as described above. Sampling will not occur on holidays or days with expected abnormal visitation (e.g., Independence Day), as to not skew the sample.

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**(C) Instrument Administration:**

Visitors who agree to participate will be asked to complete a survey on-site in the presence of the researcher. This process will continue throughout the sampling period. Individuals or groups who are unwilling, unable, or are not part of the sample to participate in the study (e.g. visitors hiking and not climbing) will be thanked for their consideration. All visitors refusing to complete the full survey will be asked if they would be willing to answer questions that will be used to check for non-response bias. In addition to the responses to the non-response bias questions, additional characteristics (i.e., gender, activity, group size, number of adults and children in group, and potential language barrier, time, location, mode of transportation) will be documented in a study log.

Surveys will be administered by trained researchers working under the supervision of the PI. All respondents will be given a laminated copy of the survey questions and the recruiter will use a tablet computer to record their verbal responses. The “interview” method will be used to facilitate skip patterns and aid in eliminating data entry errors. This process will continue throughout the sampling period.

The researchers will use the following script when working with potential respondents:

*Hello, I am conducting a study for Grand Teton National Park We were wondering if you would help us by taking a short survey that won't take more than 5 minutes to complete. Your participation is voluntary and your responses will be anonymous. Your responses will help the managers to understand the things that motivate climbers like you. Park plans will be developed based upon the expectations and experiences people have climbing here in Garnet Canyon. In total, it will take you about 5 minutes to complete to complete a short survey. Would you be willing to participate?"*

If **NO**: Do you mind if I ask three very quick questions?

- During your visit today, did other visitors and their activities interfere with your climb in Garnet Canyon?
- Including today, how many times have you climbed in Garnet Canyon?

Thank you for your time and consideration. I hope you enjoy your visit.”

If **YES**: “Thank you. Before we start, who in your group is at least 18 years old and has the next birthday? Would you be willing to participate in the study?”

The surveyor will then provide the instructions for completing the survey.

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**(D) Expected Response Rate / Confidence Level:**

It is expected that a total of 360 visitors will be contacted during the sampling period. It is estimated that 85% (n=306) will be willing to participate in the surveys. These estimates are based on previous research with climbers in Garnet Canyon of Grand Teton National Park conducted in the summer of 2015 (Abbott, et al., 2015). The research in 2015 in Garnet Canyon also employed an on-site survey, as well as a listening exercise, and received a response rate of 89%. Given that this study is sampling a similar population in the same location, a response rate of 85% is believed to be an achievable goal.

Vaske (2008) concluded that the estimated sample size for human dimension of natural resource research, typically allows generalization to a population with a 95% confidence level that the survey findings will be accurate to within ±5 percentage points. In this study, if we assume the population is 2,500 climbers and are aiming for a 95% confidence level and a 5% confidence interval, than the sample size needed is approximately 330. The current sample estimates for this study (306 completed surveys) are slightly below the recommended number, however the confidence interval is only raised slightly (to 5.2%) by this slight decrease, which is viewed as acceptable. The results of this collection will not be used to generalize any population beyond the climbers participating in this study during this sampling period. Sampling and recruiting efforts will conclude at the end of the sampling period.

Respondent Group	Initial Contacts	Acceptance 85%	Non-respondents (Soft refusals) 15%	Non-response survey 85%	Hard Refusals 15%
Garnet Canyon July	160	136	24	20	4
August	200	170	30	26	4
<b>TOTAL</b>	360	306	54	46	8

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

All visitors contacted who do not agree to participate will also be asked to provide responses to the following questions that will serve as the non-response bias check:

- *During your visit today, did other visitors and their activities interfere with your climb in Garnet Canyon?*
- *How many times have you climbed in Garnet Canyon?"*

In addition to the non-response survey questions, the surveyor will also record the following observational data for all non-respondent (including the "hard refusals")

- day, time and location of contact
- gender
- activity
- group size
- number of adults and children in group
- and potential language barrier

This process will continue throughout the sampling period at each of the study locations. This information will be used to determine any non-response bias. Any non-response bias will be reported in final reports.

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

The questions included in the survey instrument were designed, reviewed and pretested by the following: PI, Grand Teton National Park staff, as well as NPS staff with the Denver Service Center's Visitor Use Management program. Based on peer-reviews, survey questions were reduced and truncated, to include approved pool of known questions/topics, and therefore reduce burden time. Pre-testing for clarity and estimated burden time was conducted with staff at Grand Teton National Park. The final draft of the survey includes all edits and correction obtained from the pretest efforts.

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**BURDEN ESTIMATES:**

During the sample period, we plan to approach 360 potential participants. We expect that the initial contact time for all visitors will take at least one minute per person. We expect 85% (n=306) will agree to complete the survey. It is estimated that it will take an additional 5 minutes per person to complete the survey (306 x 6 minutes = 30.5 hours). We expect that 20% (n = 54) of all visitors contacted will refuse to participate in the study. For those individuals, their reason for refusal will be recorded and they will be asked to answer the non-response check questions. Based upon our estimated response rate of all of the people that refuse to take the survey 85% (n=46) will agree to answer the non-response check questions and 15% (n=8) will give a "hard refusal" and walk away. The time to complete the non-response questions is estimated to take about one minute to complete (44 x 2 minute = 1.5 hours).

The total annual burden for this collection is estimated to be 33 hours.

	Responses	Completion Time * (minutes)	Burden Hours
Completed questionnaire	306	6	31
Non-response survey	46	2	2
Total burden requested under this ICR:	<b>0</b>		<b>33</b>

\* Initial Contact time added to completion time

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#### REPORTING PLAN:

A final technical report will be delivered to the park managers and staff at Grand Teton National Park. The report will contain a description of the study purpose and key findings. Frequency distributions and descriptive statistics will be included for all survey variables. A final copy of the report will also be transmitted to the NPS Social Science Division for archiving in the Social Science Studies Collection.

## 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.