



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: 4/9/2018

PROJECT TITLE: Visitor Use and Threshold Testing at Theodore Roosevelt National Park

ABSTRACT: (not to exceed 150 words)

Many outdoor recreation activities, such as hiking and wildlife viewing, may cause impacts to the resources and to the visitor experience. Potential impacts to trails include increased muddiness, compaction, rutting, and erosion. Potential social conflicts tend to revolve around shared use with other visitors, and crowding. With an increased use of parks and protected areas, understanding impacts of this increased use, both physically and socially, is of critical importance in order to maintain the resources of Theodore Roosevelt National Park and parks like it. This study was designed to collect data about levels, types, patterns, and impacts of visitor activities at Theodore Roosevelt National Park in North Dakota, and thus, help inform the ongoing and future planning process related to visitor use management. This is phase two of the study that will help to identify the thresholds of quality that visitors are willing to accept for various activities in the park.

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PROJECT INFORMATION:

Where will the collection take place? Theodore Roosevelt National Park (THRO)

Sampling Period Start Date: May 2018

Sampling Period End Date: October 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: tablet computer (e.g. i-Pad)
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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.

According to the interagency Visitor Use Management Council, "visitor use management is the proactive and adaptive process for managing characteristics of visitor use and the natural and managerial setting using a variety of strategies and tools to achieve and maintain desired resource conditions and visitor experiences (IVUMC, 2017)." This study at Theodore Roosevelt National Park (THRO) was initiated to be a proactive study of visitor use in the park. THRO saw an increase in visitation from 559,580 visitors in 2014 to 753,880 in 2016, an increase of over 20%. This increase in visitation alerted park managers to the need to better understand their visitors and the impacts that they may have if visitation remains high and/or continues to increase. Although managers have not seen (anecdotally) any significant impacts to the ecological or experiential conditions in the park, they decided to initiate a study to prepare, proactively, for impacts that may arise if visitation continues to increase. The managers also wanted to understand if pulses of use may have any impacts on how visitors perceive their experience. For these reasons the overall purpose of this collection is to gather information to support proactive Visitor Use Management (VUM) planning efforts and inform THRO manager's decisions to provide sustainable and appropriate visitor experiences within the park. This is part two of an ongoing study. Last year information was collected to inform indicators and this study will use this information to develop thresholds for those identified indicators. This study will use an on-site survey instrument to:

1. Understand current conditions and for comparison to future monitoring efforts;
2. Inform larger visitor use management plans by identifying thresholds that may affect visitor management strategies

Study findings will be used to:

- 1) Provide baseline data for understanding current conditions and for comparison to future monitoring efforts;
- 2) Inform larger visitor use management planning processes at THRO
- 3) Update existing plans where appropriate [e.g., Final Master Plan; Backcountry Management Plan; Wilderness Plan]
- 4) Inform potential management action aimed at maintaining high quality visitor experiences and protecting ecological and cultural resources. Potential actions informed by this project may include but are not limited redistributing use, site hardening and infrastructure improvement, permitting and allocation, interpretation design and delivery, and public communication. and
- 5) Provide data that will inform thresholds for indicators that were identified in previous research activities.

The on-site questionnaires will be used to collect the specific information from visitors at each of the intercept locations each of the following locations in the park.

SURVEY METHODOLOGY:

(A) Respondent Universe:

The respondent universe for this collection will be a systematic sample of all adult recreation users (age 18 and older), at the following intercept locations during the study periods (August 2017 - June 2018).

All intercept locations	<ul style="list-style-type: none">• Individual characteristics, trip/visit characteristics, Individual activities
Loop Road – South Unit	<ul style="list-style-type: none">• Users’ perceptions of crowding at wildlife viewing areas, roadside pull offs and attraction sites (Boicort)
Oxbow Overlook – North Unit	<ul style="list-style-type: none">• Users’ perceptions of crowding at the Oxbow Overlook
Riverbend Overlook – North Unit	<ul style="list-style-type: none">• Users’ perceptions of crowding at the Riverbend Overlook

(B) Sampling Plan / Procedures:

According to the NPS visitor use statistics, approximately 708,003 people visited the park in 2017. Our sample sizes across the Spring, Summer, and Fall seasons, is intended to capture a representative sample for each location. The numbers provided in the tables below are estimates based on previous studies, areas of high, medium and low use, and park manager input.

In order to accurately gauge experiences, all visitors will be approached at the end of their experience as they are exiting the sampling areas. Sampling will occur at the entrance station in the South Unit and the overlooks at each of the locations listed below from 9am to 5pm during each 7-day sampling period: Spring (May 25-31, 2018); Summer (August 9-15, 2018) and Fall (Sept. 13-19, 2018), for a total of 21 sampling days per site. Table 1 below provide an example of the proposed sampling schedule.

Table 1. Example Sampling Schedule

Location	Sampling Days Per Site			
	Spring (May)	Summer (Aug.)	Fall (Sept.)	Total
Loop Road South Unit Entrance Station	7	7	7	21
Oxbow Overlook	7	7	7	21
Riverbend Overlook	7	7	7	21

We expect to contact at least 600 visitors during the sampling period (Table 2). Based upon our sampling methods we anticipate contacting at least 50 visitors at each site (100 at the Loop Rd) during each seven day sampling period, for a combined total of 600 people at the end of the sampling period. These are contacts, and not necessarily resulting in completed surveys.

Table 2. Expected Contacts by Season and Location

Location	Estimated Number of Visitor Contacts			
	Spring	Summer	Fall	TOTAL
Loop Road South Unit Entrance Station	100	100	100	300
Oxbow Overlook	50	50	50	150
Riverbend Overlook	50	50	50	150
Total	200	200	200	600

**Note - This survey "VISITOR THRESHOLDS" will be administered concurrently on the same days and at the same sites as the "TECHNOLOGY PREFERENCES" survey. Sampling will be such that one person from every other randomly group will receive either a visitor thresholds or a technology preferences survey.*

(C) Instrument Administration:

The initial contact with visitors will be used to explain the study and determine if visitors are interested in participating (see script below). This should take approximately one minute. If a group is encountered, the survey interviewer will ask the individual within the group with the next birthday to serve as the respondent. At this point, all individuals approached will be asked the non-response bias questions to collect information that will be used in the final analysis (see item E below). The visitors that refuse to participate will be asked if they would be willing to take two minutes to respond to non-response bias questions. The number of refusals will be recorded and used to calculate the overall response rate for the collection.

Visitors approached during the initial contact will be read the following script:

“Hello, I am conducting a survey for the National Park Service to better understand your opinions related to your how many people you saw in the park today. Your participation is voluntary and all responses will be kept anonymous. Would you be willing to take a 15-minute survey and give it back to the interviewer?”

→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. 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?” Ask them to start the process by answering the non-response bias questions (listed below). Record responses in spaces provided on the tracking sheet. Hand them a tablet survey including two photo binder they will use to evaluate the conditions at the location. Participants will then be briefed on how to utilize the provided binders to answer the questions in the survey: “Please use the binder to answer the questions in the survey when prompted, please let me know if you have any questions about the process.”

→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. *Record responses in spaces provided on the tracking sheet.*

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

The photo binders used for the study will include five, 8.5 x 11 color photos, will be used to depict levels of crowding (presented in ascending order from 0 people to 50 people) of the conditions for the location the interviewer is stationed. The respondent use the photos to answer questions 4 and 5 on the survey.

(D) Expected Response Rate / Confidence Level:

The response rate for each of the collections is based on surveys conducted by the research team at similar park sites. Based on the survey sample sizes, there will be 95% confidence that the survey findings will be accurate to within 3-5 percentage points. To achieve this, we will likely have to contact approximately 600 visitors assuming a 50% response rate (Table 4). The proposed sample sizes will be adequate for bivariate comparisons and will allow for comparisons between study sites and more sophisticated multivariate analysis. For dichotomous response variables, estimates will be accurate within the margins of error and confidence intervals will be somewhat larger for questions with more than two response categories.

The number of refusals at each location will be recorded and reported in a survey log, and will be used in calculating the overall response rate.

Table 4. Anticipated Response Rates

Location	Initial Contacts	Acceptance 50%	Non-respondents (Soft refusals) 50%	Non-response survey 20%	Hard Refusals 80%
Loop Road South Unit Entrance Station	300	150	150	30	120
Oxbow Overlook	150	75	75	15	60
Riverbend Overlook	150	75	75	15	60
TOTAL	600	300	300	60	240

(E) 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) *What type of group are you traveling with today?*
- 2) *How many people are in your group?*
- 3) *How old is the person who will complete the questionnaire?*
- 4) *How crowded did you feel in the park today? 1= not crowded to 9= extremely crowded.*

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

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

The questionnaire format and many of the questions have been used in many survey instruments previously approved by OMB. The questions are taken from the currently approved list of questions in NPS Pool of Known Questions (OMB 1024-0224; Current Expirations Date: 5-31-2019) and is largely based on the approved protocol from Buffalo National River (7/22/2016). Variations of the questions have been reviewed by THRO managers and professors from Kansas State University and Clemson University. The questionnaire was tested on eight voluntary members of the general public for burden length and clarity of the questions. Feedback from the volunteers was incorporated in the final questionnaire.

BURDEN ESTIMATES:

Overall, we plan to approach a total of 600 individuals across all sites during the sampling periods. Among which we anticipate that 300 individuals will agree to participate and complete a survey while on site which will take about 15 minutes to complete. We expect that 300 (50%) visitors will refuse to participate and for those individuals, we attempt to record their reason for refusal.

Of all the visitors refusing to accept the invitation (n= 300) we will ask if they would be willing to take one minute to answer the four questions (above) that will serve as the non-response bias check for this collection. We expect that 20% (n=60) of the on-site refusals will answer the non-response bias questions. We anticipate that it will take a minute, resulting in a total of 1 hour for the non-response survey (60 x 1 minutes = 1 hour).

In addition to the one minute initial contact time, we expect that an additional 15 minutes will be required to complete and return the on-site questionnaire (300 responses x 16 minutes = 80 hours). The burden for the on-site survey combines the initial contact plus the non-response survey with the time to complete the survey, which is estimated to be 81 hours (Table 5).

The remaining 240 visitors completely refusing to accept any part of the invitation to participate will not incur a respondent burden and for those individuals, however, we will attempt to record their reason for refusal.

Table 5. Estimate Annual Respondent Burden

	Responses	Completion Time * (minutes)	Burden Hours
		<i>Contact time added to completion time</i>	
Completed questionnaire	300	16	80
Non-response survey	60	1	1
Total burden requested:	360		81

REPORTING PLAN:

The study results will be presented in internal agency reports for NPS managers at the park. Response frequencies will be tabulated and measures of central tendency computed (e.g., mean, median, mode, as appropriate). The reports 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 available upon request.

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.