*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:** 03/13/2019

**PROJECT TITLE:** **Shenandoah National Park** **Old Rag Mountain Visitor Use Study**

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

Managers at Shenandoah National Park (SHEN) are concerned with intensive levels of visitor use on Old Rag Mountain, which is located in Congressionally Designated Wilderness where preservation of natural resource conditions and primitive visitor experiences are legally mandated. However, the park has no data regarding relationships between use levels, resource conditions, and visitors’ experiences on Old Rag. To address these concerns and data gaps, SHEN managers aim to study temporal and spatial distributions of visitor use on Old Rag Mountain to evaluate how current visitor use levels align with management objectives for resource protection, visitor safety, and visitors’ experiences. This collection will provide SHEN managers with information on visitation patterns and volumes, visitor experience quality, and resource and safety perceptions using an onsite visitor questionnaire and a visitor route card. The need to address increasing visitor experience, resource, and safety concerns on Old Rag necessitates a collection in fall 2019.

**PRINCIPAL INVESTIGATOR CONTACT INFORMATION:**

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**PARK OR PROGRAM LIAISON CONTACT INFORMATION:**

**Name:** James Schaberl, Chief, Natural and Cultural Resources Division

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**PROJECT INFORMATION:**

**Where will the collection take place?** Shenandoah National Park (SHEN)

**Sampling Period Start Date:** October 1, 2019 Sampling Period End Date: October 31, 2019

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

**□** **Mail-Back Questionnaire** **□** **Face-to-Face Interview** **□** **Focus Groups**

☒ **On-Site Questionnaire** **□** **Telephone Survey**

☒ **Other (On-site Visitor Route Card)**

**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.*

Old Rag Mountain in Shenandoah National Park (SHEN) is a popular backcountry destination for hikers in the park. Old Rag Mountain is within the Shenandoah Wilderness where preservation of natural resource conditions and primitive visitor experiences are paramount. However, recent research has found that conditions on and around Old Rag Mountain are deviating from prescribed conditions for Wilderness areas. For example, a study from 2012 estimates that upwards of 71,600 visitors hiked the Old Rag trail loop during the 12-month period from September 2011 – August 2012. High levels of use in backcountry areas, particularly on mountain summits, can affect visitors’ experiences and safety and cause negative impacts to natural and cultural resources. Furthermore, previous research to estimate natural resource conditions has described the Old Rag Mountain Trail as a Threshold Wilderness area where visitor caused impacts are noticeable and significant. These studies describe the implications of high levels of visitor use, however, no research has been conducted to estimate relationships between use levels and the negative implications of high visitor use levels to inform decisions about visitor use management on the Old Rag Mountain Trail.

To help park managers better understand these issues, an on-site visitor questionnaire and visitor route card will be administered to visitors on the Old Rag Mountain Loop Trail. The questionnaire will be used to evaluate location-specific visitor perceptions of crowding, safety, and experiences. The questionnaire will be administered to visitors exiting the Loop Trail. The visitor route card will be used to collect spatial and temporal information about visitor travel patterns along the Old Rag Loop Trail for the duration of visitors’ hikes. Specifically, the visitor route card will provide information on visitor travel times between key points of interest in the study area (Old Rag Mountain Loop Trail). The visitor route card will also provide information on the pattern of travel between key points of interest. Because the visitor route card will be administered at the beginning of a visitor’s trip, it will collect spatial and temporal information in real-time as the trip is occurring, rather than relying on visitors’ recollections of spatial and temporal information at the completion of their trip. In this way, the visitor route card will allow for the collection of more robust and precise spatial and temporal travel pattern data than can be collected via the on-site questionnaire (administered at the end of a visitor’s trip). The visitor route card data will be paired with other measures of visitor use volumes to generate estimates of visitor densities at key locations along the Old Rag Mountain Loop Trail.

Together, the on-site questionnaire and visitor route card data collected will allow park managers to incorporate visitor opinions, perceptions, and experiences into longer-term visitor use management decisions for Old Rag Mountain.

**SURVEY METHODOLOGY:**

1. **Respondent Universe:**

The respondent universe for this collection will be all recreational visitors, age 18 or older, who hike on the Old Rag Mountain Loop Trail during the sampling period.

1. **Sampling Plan / Procedures:**

The sampling plan described below is for the proposed visitor study including 1) on-site visitor questionnaire, and 2) on-site visitor route card.

**On-site Visitor Questionnaire**

An on-site visitor questionnaire will be administered to visitors exiting from the Old Rag Mountain Loop Trail at the end of their hikes. The on-site visitor questionnaires will be administered for a total of 10 days. Throughout the duration of the study period, the sampling days will be stratified across weekdays and weekend days such that sampling will occur on six weekdays and four weekend days (Table 1). Sampling will be conducted over a 6-hour period on each sampling day, starting between 10:00 am and 12:00 pm and concluding between 4:00 pm and 6:00 pm on each sampling day, in order to coincide with peak periods of visitor use. Sampling locations will be staffed with the appropriate number of survey administrators to ensure daily targets are met on weekends and weekdays.

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

|  |  |  |  |
| --- | --- | --- | --- |
| Location | October | |  |
| **On-site Visitor Questionnaire** | Week day | Week  end | **TOTAL** |
| Old Rag Mountain Loop Trail | 6 | 4 | 10 |

The visitor questionnaire will be administered as an on-site completion survey; participants will be expected to complete and return the questionnaire to the survey administrator before leaving the sample intercept area. At the intercept location, a “first-after-last completed” sampling approach will be used to randomly select visitor groups for participation in the study. At the start of the sampling period, the first visitor group to exit will be greeted and asked if their visit to the study area (i.e., Old Rag Mountain Loop Trail) has concluded for the day. If the visitor group answers “yes”, the study administrator will introduce the purpose of the study and ask if the visitor group is willing to participate. If a visitor group agrees to participate, they will be asked which member of the group (at least 18 years old) has the next birthday; the individual with the next birthday will be asked to complete the questionnaire for the group. This will be done to randomize selection of the individual within the group to complete the questionnaire. Upon completion of the questionnaire by the participant, the survey administrator will collect the completed questionnaire and thank the participant for their time. The survey administrator will then approach the next exiting visitor group and repeat the above specified intercept process. If an approached visitor group responds “no” to the question of whether or not their visit to the study area is completed for the day, the survey administrator will record the group as ineligible, thank them for their time, and will approach the next exiting visitor group.

After being contacted to participate in the survey, an interview, lasting approximately two minutes, will be conducted with all eligible visitor groups, regardless of whether or not they agreed to participate in the study. The answers to these pre-selected questions will be used to perform a non-response bias analysis in which responses from participants are compared to responses from visitors refusing to participate in the study.

The target number of completed questionnaires is 400 questionnaires. This target number is intended to ensure that an adequate sample will be generated so that there will be a 95% confidence that the survey findings will be accurate to approximately 5 percentage points (based on the formula where confidence level = 1 ÷ √N, where N = target distribution number). Given this target number of completed questionnaires, and an assumed acceptance rate of 66% (See Section D: Expected Response Rate/Confidence Interval for more detail), the total number of visitor contacts will be 600 visitors (Table 2).

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

|  |  |  |  |
| --- | --- | --- | --- |
| Location | October | |  |
| **On-site Visitor Questionnaire** | Week day | Week  end | **TOTAL** |
| Old Rag Mountain Loop Trail | 360 | 240 | 600 |

**On-site Visitor Route Card**

A visitor route card will be administered to visitor groups hiking on the Old Rag Mountain Loop Trail. Route cards will be administered to a random sample of entering visitor groups at the trailhead for a total of 10 days. Throughout the duration of the study period, the sampling days will be stratified across weekdays and weekend days such that sampling will occur on six weekdays and four weekend days (Table 2). Sampling will be conducted over a 6-hour period on each sampling day, starting between 7:00 am and 10:00 am and concluding between 1:00 pm and 4:00 pm on each sampling day, in order to coincide with peak periods of visitor use. Sampling locations will be staffed with the appropriate number of survey administrators to ensure daily targets are met on weekends and weekdays.

**Table 3. Sampling Days Per Site - On-site Visitor Route Card**

|  |  |  |  |
| --- | --- | --- | --- |
| Location | October | |  |
| **On-site Visitor Route Card** | Week day | Week  end | **TOTAL** |
| Old Rag Mountain Loop Trail | 6 | 4 | 10 |

On each sampling day, visitor route card administrators will be stationed at the trailhead intercept location and a “first-after-last completed” sampling approach will be used to randomly select visitor groups for participation in the study. At the start of the sampling period, the visitor route card administrator stationed at the intercept location will contact the first arriving group and ask them if they would be willing to participate in the study. If a visitor group agrees to participate, they will be asked which member of the group (at least 18 years old) has the next birthday; the individual with the next birthday will be asked to carry the route card for the group. This will be done to randomize selection of the individual within the group to carry the route card. For each visitor group agreeing to participate, the visitor route card administrator will record on a route card the size of the visitor group, the date, and the current time. The visitor route card administrator will then hand the visitor group the route card and instruct them to carry the card during their hike and to hand the card to each visitor route card administrator they encounter during their hike. The visitor route card administrator will then approach the next arriving visitor group and repeat the above specified intercept process. If an approached visitor group refuses to participate in the study, the visitor route card administrator will record the group as a refusal, thank them for their time, and will approach the next arriving visitor group.

After being contacted to participate in the study, an interview, lasting approximately two minutes, will be conducted with all approached visitor groups, regardless of whether or not they agreed to participate in the study. The answers to these pre-selected interview questions will be used to perform a non-response bias analysis in which responses from participants are compared to responses from visitors refusing to participate in the study.

The target number of completed visitor route cards is 400 route cards. This target number is intended to ensure that an adequate sample will be generated so that there will be a 95% confidence that the survey findings will be accurate to approximately 5 percentage points (based on the formula where confidence level = 1 ÷ √N, where N = target distribution number). Given this target number of completed route cards, and an assumed acceptance rate of 66% (See Section D: Expected Response Rate/Confidence Interval for more detail), the total number of visitor contacts will be 600 visitors (Table 4).

**Table 4. Number of Visitors Contacted Per Site – Visitor Route Card**

|  |  |  |  |
| --- | --- | --- | --- |
| Location | October | |  |
| **On-site Visitor Route Card** | Week day | Week  end | **TOTAL** |
| Old Rag Mountain Loop Trail | 360 | 240 | 600 |

1. **Instrument Administration:**

The initial contact with all visitor groups for both the on-site visitor questionnaire and the on-site visitor route card will be used to explain the study and determine visitor groups’ interest in participating. When a visitor group is intercepted according to the “first-after-last-contact” protocols (See Section B: Sampling Procedures) and expresses interest in the study, the survey administrator will ask if there is at least one member of the group that is at least 18 years of age or older (if it is not apparently obvious). Once it is established that one or more adult group members exist, the adult group member with the next birthday in the group will be asked to participate in the study. The initial contact is not expected to take more than one minute.

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 on-site field 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.
* Recommending the adjustment of the specific bounds of the survey administration area to better capture flows of visitors.

**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 before leaving the sampling area. The on-site intercept script for the visitor questionnaire is as follows:

“*Hello, my name is \_\_\_\_\_\_\_\_\_. I am conducting a survey for Shenandoah National Park to help managers understand your experience on the trail today. Your participation is voluntary and all responses will be kept anonymous. Would you be willing to complete a survey questionnaire about your experience on the trail today?”*

*🡺 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. Has your visit to Old Rag concluded for the day?”*

*🡺 If NO (visit is not complete) – then say, “Ok. Thank you for your time and have a great day.”*

*🡺 If YES (visit it complete) – then say, “Ok. Thank you for your time and have a great day.”*

*“Great. 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 (hand the questionnaire and writing utensil to the participant). Most of our questions are in the questionnaire booklet itself, but I do have a few questions I need to ask you now.”*

*[The survey administrator will ask them to start the process by answering 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 form. After completing the non-response bias question interview, the survey administrator will direct the respondent to a location where they may take the survey.]*

*🡺 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 couple of questions for me now, to help us be sure our sample is reliable?”*

*[The survey administrator will ask them to start the process by answering 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 form.]*

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

**Photo Elicitation Component of On-site Visitor Questionnaire**

Approximately one-third of the way through the survey, each respondent will be asked to review a series of six photographs used to depict various levels of crowding on the top of Old Rag. Each of the six photographs will be presented individually, and the respondent will be asked to view each photo and indicate (yes or no) if they would feel crowded with the number of people in the area photographed. The order of the photographs will be predetermined, such that each respondent viewing the set of photographs views them in the same order. Additionally, eight sets of six photographs will be prepared for use in this portion of the on-site visitor questionnaire – the sets of six photographs will be administered on a rotating basis, such that the first respondent, ninth respondent, eighteenth respondent, etc., evaluates the same set of six photographs (set 1) and the second respondent, tenth respondent, nineteenth respondent, etc., evaluates the same set of six photographs (set 2). At the end of the photo evaluation section, the survey administrator will leave the respondent to complete the remainder of the survey.

**Visitor Route Card**

The visitor route card is designed to collect spatial and temporal information about visitor travel patterns along the Old Rag Mountain Loop Trail throughout the duration of visitors’ trips in the study area. Specifically, the visitor route card will provide information on visitor travel times between key points of interest in the study area. The visitor route card will also provide information on the pattern of travel between key points of interest. Because the visitor route card will be administered at the beginning of a visitor’s trip, it will collect spatial and temporal information in real-time as the trip is occurring, rather than relying on visitors’ recollections of spatial and temporal information at the completion of their trip. In this way, the visitor route card allows for the collection of more robust and precise spatial and temporal travel pattern data than can be collected via the on-site visitor questionnaire (administered at the end of a visitor’s trip in this study). The visitor route card data will be paired with other measures of visitor use volumes to generate estimates of visitor densities at key locations along the Old Rag Mountain Loop Trail.

To administer the visitor route card, three waypoints will be established at key nodes and/or destinations along the trail. At each waypoint, there will be a survey administrator that will collect the route card from passing participants, record the location and time on the card, and hand the route card back to the respondent. Additionally, a survey administrator will be stationed to collect route cards from visitors exiting the sampling area. Before turning in their route cards, each participant will be asked to answer up to three survey questions about their experience included on the back of the route card, after which the completed route card will be collected by a survey administrator.

To begin the visitor route card, the identified respondent will be given a route card, provided instructions about how to participate in the study, and will be informed that no personally identifiable information will be collected. The respondents will be told that they are expected to return the route card to a study administrator at the end of their hike, before leaving the study area. The on-site intercept script for the visitor route card is as follows:

“*Hello, my name is \_\_\_\_\_\_\_\_\_. I am conducting a survey for Shenandoah National Park to help managers understand your travel patterns on the trail today. Your participation is voluntary and all responses will be kept anonymous. Would you be willing to participate in a route card study to document your travel patterns on the trail today?”*

*🡺 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 this study?”*

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

*If NO (have not previously participated) then, “Thank you for agreeing to participate. Participation should not take more than 6 minutes total spread across the duration of your hike. Of the adults in your group, whose birthday is next?” (Identify visitor and direct next portion of contact to this visitor.)*

*[Before the route card is administered to the respondent, the survey administrator will note the card ID number, date, their initials, the visitors’ group size, the visitors’ route, and if they are a day or overnight visitor. The identified respondent will then be provided instructions using the following script.]*

*“Great, I have a route card for you. The route card allows us to understand patterns of visitation to Old Rag Mountain. You will carry the route card for the duration of your hike and return it to a survey administrator at the end of your hike. Along the way, you will periodically encounter other survey administrators who will ask you for your card. They will record the time of day and location on the card, and will then return it to you. Each of these contacts will take less than 30 seconds, with no more than 10 total contacts. At the end of your hike, you will be asked the answer a couple of questions on the back of the card before returning it to the survey administrator.*

*Before you continue, I do have a few questions I need to ask you now.”*

*[The survey administrator will ask them to start the process by answering the non-response bias questions. The responses will be recorded in spaces provided on the survey log and non-response bias form. After completing the non-response bias question interview, the survey administrator will thank the group for their time and the group will proceed with their hike.]*

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

*[The survey administrator will ask them to start the process by answering the non-response bias questions. The responses will be recorded in spaces provided on the survey log and non-response bias form.]*

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

1. **Expected Response Rate / Confidence Level:**

**On-Site Visitor Questionnaire**

Approximately 600 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, using similar prescribed sampling methods, we propose an on-site acceptance rate of at least 66% for this collection. We anticipate we will receive 400 completed surveys from all visitors contacted.

The number of refusals will be recorded and reported, and will be 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 5 percentage points.

An experienced on-site field supervisor will track survey response rates on a daily basis and will provide additional training and support for survey interviewers with response rates lower than anticipated.

**Visitor Route Card**

Approximately 600 visitors will be contacted for the on-site visitor route card. Based upon similar studies conducted by Resource Systems Group, Inc. (RSG) for the National Park Service, using similar prescribed sampling methods, we propose an on-site acceptance rate of at least 66% for this collection. We anticipate we will receive 400 completed surveys from all visitors contacted.

The number of refusals will be recorded and reported, and will be 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 5 percentage points.

An experienced on-site field supervisor will track survey response rates on a daily basis and will provide additional training and support for survey interviewers with response rates lower than anticipated.

**Table 5. Expected Acceptance Rates**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Instrument** | **Initial Contacts** | **Acceptance**  **66%** | **Non-respondents**  **33%** | **Non-response survey**  **80%** | **Hard Refusals**  **20%** |
| Visitor Questionnaire | 600 | 400 | 200 | 160 | 40 |
| Visitor Route Card | 600 | 400 | 200 | 160 | 40 |
| **Total** | **1,200** | **800** | **400** | **320** | **80** |

1. **Strategies for dealing with potential non-response bias:**

Responses to the non-response bias questions will be recorded for every contact, except “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. For all “hard refusals”observational data (group size, gender, and time of day) will be recorded. The number of refusals will be recorded and used to calculate the overall response rate for the collection at the park.

**On-site Visitor Questionnaire**

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 refused to participate when initially contacted and did not give a “hard refusal” (refuse to participate in the study, and refuse to answer the non-response bias questions), and to respondents in groups who agreed to participate. Responses to these questions will be recorded by the survey administrator on the survey contact log form.

*1. Did you feel crowded on the Old Rag hike as a whole today? Yes/No*

*2. Including yourself, how many people were in your personal group on your hike today?*

*3. On your hike today, what type of group were you with?*

*4. What is your state or country of residence (if not US)?*

**Visitor Route Card**

Non-response bias protocols for the visitor route card will be the same as for the on-site questionnaire; however, only the following three questions will be asked:

*1. Including yourself, how many people are in your personal group on your hike today?*

*2. On your hike today, what type of group are you with?*

*3. What is your state or country of residence (if not US)?*

1. **Description of any pre-testing and peer review of the methods and/or instrument:**

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

Pretesting of the on-site visitor questionnaire occurred with four administrative staff (e.g., H.R. representatives, accountants) 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.

Due to the nature of the visitor route card and the terrain of the sampling location, pretesting will not be conducted prior to scoping in the field. We are assuming it will take up to 30 seconds for a visitor to receive a timestamp on their route card, each time they contact a survey administrator (up to 10 times). It is also assumed that each question on the route card will take up to 1 minute for the visitor to complete (up to 3 questions).

**BURDEN ESTIMATES:**

The combined total burden for this collection is estimated to be 192 hours. For both survey efforts (Visitor Questionnaire and Visitor Route Card), we have estimated respondent burden as follows:

* Total Initial contact time: 20 hours.

One minute will be used to explain the survey to all visitors contacted and to request participation (n=1,200).

* Non-response bias check (All non-respondents): 5 hours

After the initial contact an additional three minutes will be used to conduct the non-response bias check with all non-respondents (n=320).

* Visitor Study Survey and non-response bias check (completed survey): 80 hours.

After the initial contact an additional 15 minutes will be used to complete the non-response bias check and return the on-site questionnaire (n=400)

* Visitor Route Card and non-response bias check (completed route card): 40 Hours

After the initial contact 10 minutes will be used to complete the non-response bias check and return the completed route card (n=400)

It is expected that the remaining 80 visitors (approximately 7% of all visitors contacted) 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.

**Table 6. Burden Estimates**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Estimated Total Number** | |  | **Estimation of Time (minutes)** | |  | **Estimation of Burden (hours)** | | |
| **Initial Contacts** | **1,200** |  | **Initial Contact** | **1** |  | **Initial Contact** | | **20** |
| **All Non-Respondents**  **Instructions/Non-Response Check** | **320** |  | **Non-response check (Non-Respondents)** | **3** |  | **Non-response check (Non-Respondents)** | | **5** |
| **Visitor Survey Instructions/Non-Response Check** | **400** |  | **Visitor Survey** | **15** |  | **Visitor Survey** | | **100** |
| **Visitor Route Card**  **Instructions/Non-Response Check** | **400** |  | **Visitor Route Card** | **10** |  | **Visitor Route Card** | | **67** |
| **Hard refusals** | **80** |  | **Non-participation** | **0** |  | **Non-participation** | | **0** |
|  |  |  |  |  |  |  | **Total 192** | |

**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 hard copy and electronic formats, 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.

**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.