



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:

PROJECT TITLE: North Cascades National Park Stephen T. Mather Wilderness Visitor Survey

ABSTRACT: (not to exceed 150 words)

The Aldo Leopold Wilderness Research Institute (RMRS, Forest Service), in partnership with the National Park Service (NPS) and the University of Montana, aim to support park managers with relevant knowledge to inform visitor use management (VUM). This survey instrument will be administered at North Cascades National Park (NP) from July 1, 2024, to October 31, 2024. North Cascades administers the Stephen Mather Wilderness, which spans across 642,340 acres and is one of the largest wilderness systems in the continental United States. The survey will evaluate visitor experiences, values, motivations, opinions about management actions, and demographics of visitors. The survey, developed in collaboration with managers and planners, will directly support an upcoming wilderness stewardship planning process; further, the survey results will serve as a reference point to evaluate any long-term trends, and will thus support long-term planning efforts.

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PROJECT INFORMATION:

Where will the collection take place?

Sampling Period Start Date: 07/1/2024

Sampling Period End Date: 10/31/2024

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

Mail-Back Questionnaire

On-Site Questionnaire

Telephone Survey

Face-to-Face Interview

Focus Groups

Other (emailed survey)

Will an electronic device be used to collect information? No Yes - Apple Tablet

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.

The Aldo Leopold Wilderness Research Institute (RMRS, Forest Service), in partnership with the National Park Service (NPS) and the University of Montana, aim to support park managers with relevant knowledge to inform visitor use management (VUM) at North Cascades National Park (NOCA). NOCA administers the Stephen Mather Wilderness, which spans across 642,340 acres and is one of the largest wilderness systems in the continental United States. The survey will evaluate visitor experiences, values, motivations, opinions about management actions, and demographics of visitors. Specifically, to provide NPS staff with knowledge relevant to wilderness VUM and planning, this survey will:

1. Support North Cascades managers and planners in their recently initiated Wilderness Stewardship Planning effort, including an update to the Park's Wilderness Management Plan.
2. Extract basic wilderness visitor use characteristics of day users including visitor demographics and visitor use patterns (frequency, density, and temporal and spatial distribution) to provide the foundational basis for understanding current visitor use and inform issues to be addressed in the wilderness stewardship planning effort.
3. Document visitors' primary information sources for trip planning, Leave No Trace principles, weather/current conditions, congestion/crowding, wildlife, and wildlife encounters at the park. These data will help inform visitor education and outreach efforts.
4. Ascertain visitor motivations, values, and desired experiences, including knowledge about federally designated wilderness, behaviors, and management actions within wilderness boundaries. These data will help park managers better understand wilderness visitors.
5. Results will also reveal current wilderness visitor trends and then serve as a reference point to evaluate any long-term trends in visitor experiences, values, motivations, and opinions about management, and information sources on Stephen Mather Wilderness lands.

Results from this study will provide input to making wilderness recreation decisions, including numbers of people that can safely use an area, required transportation infrastructure for facilitating desired recreation experiences, and potential management actions to support preservation of wilderness character and recreation experiences.

SURVEY METHODOLOGY

(A) Respondent Universe: All respondents will be Stephen Mather Wilderness visitors aged 18 or older. The respondent universe includes both day users and overnight users during the high-use season. The size of the day use population is not fully known, but a backcountry use report developed in 2020 suggests that day use for five major areas of the park, on average across 2017, 2018, and 2019, was 14,167. This estimate was calculated with the use of trail counter data, adjusted for the numbers of overnight permits in the area. In general, recreation use has increased in the last few years due to increasing popularity of outdoor recreation (driven partly by the COVID-19 pandemic). Therefore, we estimate that the day use population is likely closer to 20,000 people per year.

The estimate of overnight use is 7,000, on average over the past 8 years. The overnight use estimate is likely more reliable, as it is based on the number of permits issued for overnight camping, which is required throughout the park. Overnight use is regulated by permits, which means that it will likely not change much from the previous years.

For day users, the intended implementation method is intercept, otherwise known as face-to-face contact, on-site, where the participant will be given the option to complete the survey on an electronic tablet, a paper copy, or verbally with the research technician. For overnight users, electronic contacts via email (email addresses will be obtained through recreation.gov permits) using the multiple contact method will be implemented.

(B) Sampling Plan / Procedures: For day users, researchers will use a cluster sampling approach. The sampling approach was developed in collaboration with park managers. Sampling will occur between July 15, 2024, and October 31, 2024, to capture the park's peak visitor season. Researchers will systematically intercept visitors at the end of their visit at specified times and locations by approaching every n th person in busy areas and every fourth person in less busy areas. For groups, one person may volunteer to take the survey. If multiple people are willing, then the person with the nearest birthday will be selected to respond to the survey. If that person does not want to respond to the survey, another member of the group may volunteer if they desire. Sampling will be evenly distributed among days of the week (Monday-Sunday) and between two four-hour time blocks (10:30-14:30 and 14:30-18:30). The majority of visitation happens from June through November, with a mostly even distribution of use across days of the week. Visitors will be contacted at six access points within North Cascades National Park, which were identified by managers as important for their planning efforts. For each access point, visitors exiting the wilderness will be targeted. Given the available survey administration resources (time, budget), the lowest use trailheads will not be targeted.

For overnight users, surveys will be sent via email. Email addresses will be obtained from permits procured on recreation.gov; specifically, the research team will get emails from the National Park Service administrator of recreation.gov at North Cascades National Park (see methods employed by Creany, Monz, & Esser, 2024). Emails will be stored on a secure server, within a single spreadsheet – following the sampling period, all emails addresses will be deleted. Surveys will be sent randomly to 35% of permit holders on the week after returning from their trip; surveys will be sent on every Thursday of the sampling period, when applicable (i.e., when there is at least one permittee returning from their trip).

(C) Instrument Administration: For day users, researchers will position themselves at one of the designated sampling locations at a randomized, predetermined day and time block. Researchers will approach every *n*th person or group that passes by post-experience and politely ask if they would like to participate in the on-site survey using the day user script below. Visitors that agree will be asked to complete the survey using a sanitized tablet or a paper copy of the questionnaire. In order to ensure inclusivity of those with potential hearing, visual, or mobility impairments, we will provide several options for survey administration. For those with hearing impairments, the survey will be available for reading; for those with visual impairments, a survey technician will administer the survey orally; for those who may have mobility impairments, the survey technician will record answers for the participant.

Day User Script

Hi, the University of Montana is cooperating with the National Park Service in conducting a 15-minute visitor survey on the Stephen T. Mather Wilderness. The visitor use survey will support wilderness stewardship planning, including a future management plan. Your input is very important. Would you be willing to complete a survey?

[if NO] – the surveyor will thank the visitor and ask them to answer the two questions that will serve as a non-response bias check (in Section E below)

[if YES] – The surveyor will begin the on-site visitor survey with the recruited individual after reading the Paperwork Reduction and Privacy Act below. The surveyor will administer the survey. Upon completion of the on-site survey, the respondent will be thanked for their time.

Before we begin, I would like to let you know that this survey has been approved by the Office of Management and Budget. It is important to note that a Federal agency may not conduct or sponsor, and you are not required to respond to, a collection of information unless it has a valid OMB control number. The control number for this collection is XXXX-XXXX and this number is valid through XX/XX/XXXX. Secondly, your participation is voluntary and your name will never be connected with your individual responses. This survey will take about fifteen minutes of your time today.

For overnight users, researchers will work with the point of contact for North Cascades NP recreation.gov permitting to obtain the email addresses of permittees, along with the start and end date of all permitted trips. For 35% of those permittees who 'activated' their permits (i.e., they actually went on their trip into the wilderness) each day, researchers will send, at random, an initial copy of the survey via email (and online link) to visitors on the Thursday after their scheduled trip end date. Using the multiple contact method, a follow-up email reminder will be sent at one week, three weeks, and six weeks after their scheduled trip end date (barring a response). For each response attained, a thank you email will be sent. The email scripts, with the Paperwork Reduction and Privacy Act statement, are below:

Overnight User Script (Initial Email)

Dear Visitor,

I hope that your overnight trip in North Cascades National Park went great! My name is _____. The University of Montana is cooperating with the National Park Service in conducting a visitor survey on the Stephen T. Mather Wilderness. The visitor use survey will support wilderness stewardship planning, including a future management plan.

We kindly ask you to participate, if you are 18 years or older. This questionnaire will take about 15 minutes to complete. Your participation is voluntary, you may discontinue the survey at any time, and there are no risks associated with participating in this survey. Your survey answers will be kept anonymous.

Before you begin, I would like to let you know that this survey has been approved by the Office of Management and Budget. It is important to note that a Federal agency may not conduct or sponsor, and you are not required to respond to, a collection of information unless it has a valid OMB control number. The control number for this collection is XXXX-XXXX and this number is valid through XX/XX/XXXX. Secondly, your participation is voluntary and your name will never be connected with your individual responses. This survey will take about fifteen minutes of your time today.

Please find the survey link here: [insert survey link]

Sincerely,

[insert Survey Technician Name]

Overnight User Script (Follow-up email for reminders)

Dear Visitor,

I recently reached out to you about your overnight trip to North Cascades National Park. This is a friendly reminder to consider our request below.

My name is _____. The University of Montana is cooperating with the National Park Service on conducting a visitor survey on the Stephen T. Mather Wilderness. The visitor use survey will support wilderness stewardship planning, including a future management plan.

We kindly ask you to participate if you are 18 years or older. This questionnaire will take about 15 minutes to complete. Your participation is voluntary, you may discontinue the survey at any time, and there are no risks associated with participating in this survey. Your survey answers will be kept anonymous.

Before you begin, I would like to let you know that this survey has been approved by the Office of Management and Budget. It is important to note that a Federal agency may not conduct or sponsor, and you are not required to respond to, a collection of information unless it has a valid OMB control number. The control number for this collection is XXXX-XXXX and this number is valid through XX/XX/XXXX. Secondly, your participation is voluntary and your name will never be connected with your individual responses. This survey will take about fifteen minutes of your time today.

Please find the survey link here: [insert survey link]

Sincerely,

[insert Survey Technician Name]

For the day-use surveys, which includes questions used in the non-response bias check (i.e., length of time visiting the Park, and group size): Three potential outcomes are expected following the request to participate:

1. Complete refusal;

2. Partial refusal, answering non-response questions but nothing further;
3. Complete on-site survey.

For the overnight-use surveys, only two potential outcomes are expected:

1. Complete refusal
2. Completion of survey

(D) Expected Response Rate / Confidence Level:

For day users, we plan to contact a total of 754 individuals and expect 50% to agree to participate (n=377). Assuming a response rate of 50% (n= 377), we expect to be able to generalize to the population of around 20,000 with a 95% confidence level (Needham and Vaske, 2008).

Table 1. Anticipated Onsite Survey Response Rates

Total Number of Visitor Contacts	Completed Onsite Surveys (50% of contacts)	Refusals (50% of contacts)	Completed Non-Response Surveys (30% of refusals)	Hard Refusals (70% of refusals)
754	377	377	113	264

For overnight users, with a population of around 7,000, a sample size of 367 would be adequate for generalizing to the population with a 95% confidence level (Needham and Vaske, 2008). The response rate for an email survey is expected to be much lower than that of an on-site survey. Research shows that response rates for online/electronic surveys are highly variable; one research article, which incorporated evidence from several meta-analyses, found average response rates between 34% and 44%—with individual study response rates ranging from under 10% to near 100% (Wu et al., 2022). Personal communication with individuals who have administered surveys via email within the natural resource field for the purpose of public land management reported less optimistic levels of response around 10%. Given the variation in how online surveys are administered, it is challenging to predict the level of response based on current research; however, the multiple contact method has been shown to be effective in increasing response rates. Therefore, we are assuming, with the multiple contact method, a 15% response rate will be attainable. Thus, we plan to contact a total of 2,445 overnight users and expect 15% (n=367) to complete the survey.

Table 2. Anticipated Email Survey Response Rates

Total Number of Visitor Contacts	Completed Email Surveys (15% of contacts)	Refusals (85% of contacts)
2,445	367	2078

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

For day use, all refusals will be recorded, reported, and analyzed using two non-response bias questions. For those who refuse the survey, the survey administrator will ask the following:

- For approximately how many years have you visited the Stephen Mather Wilderness?
- How many people were in your group, including you?

For overnight use, there is existing information on the permits where email addresses are obtained, and therefore we do not need to ask any non-response questions to the visitors. Instead, we will use group size and length of stay (number of nights) to check non-response.

Based on the data collected, we will test for non-response bias for both on-site and electronic surveys. The assessment of potential non-response bias will be evaluated by comparing the distributions of surveys with those data from people who returned their surveys. Specifically, Chi-square tests of homogeneity of proportions will be used to compare items with returned survey responses in order to detect and quantify non-response bias (Agresti, 2013).

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

The survey questions are pulled from the NPS Pool of Known (OMB Control Number 1024-0224, expiration: 08/31/2026). This survey and the methods described here are similar to previous wilderness use studies that have been conducted within the NPS. Further, this study was pretested on 5 members of the public in order to assess clarity and estimate burden.

BURDEN ESTIMATES

The total burden for this survey is 203 hours. This includes the burden for the on-site survey, the on-site non-response survey, and the email survey.

- On-site Survey: We estimate that of the 754 visitors initial contacted, 377 will agree to complete the survey. The initial contact will take 1 minute, and it will take an additional 15 minutes to complete the survey, resulting in a total burden of 101 hours.
- On-site Non-Response Survey: Of the 377 visitors who decline to participate in the full survey, we expect 113 will agree to complete the non-responses survey. This will take a total of 2 minutes (one minute for initial contact and one minute to answer non-response questions). Thus, resulting in a total burden of 4 hours.
- E-mail Survey: We estimate that of the 2,445 visitors contacted, 367 will complete the online survey. The survey will take 15 minutes to complete, plus an additional minute for respondents to read the e-mail invitation, resulting in a total burden of 98 hours.
- Burden for those who completely refuse to respond (on-site and online) will not be calculated due to the de minimums nature of their participation.

Table 3. Burden Estimates

	Completed Responses	Completion Time * (minutes)	Burden Hours (rounded up)
On-site Survey*	377	16	101
On-site non-response survey	113	2	4
Email survey*	367	16	98
Total burden requested under this ICR:	857		0203

* Initial contact/email reading time of one minute is added to the time to complete the surveys

REPORTING PLAN: It is expected that the results will provide input to making wilderness recreation decisions, including numbers of people that can safely use an area, required transportation infrastructure for facilitating desired recreation experiences, and potential management actions to support preservation of wilderness character and recreation experiences. The information collected will inform the formal ‘wilderness stewardship planning’ process, as well as the public relations required throughout that process. All results will be provided in a final report, as well as through a presentation to North Cascades NP and national and regional planners within the NPS.

References

- Agresti, A. (2013) *Categorical Data Analysis*, John Wiley & Sons, 3rd Ed., New Jersey.
- Creany, N., Monz, C. A., & Esser, S. M. (2024). Understanding visitor attitudes towards the timed-entry reservation system in Rocky Mountain National Park: Contemporary managed access as a social-ecological system. *Journal of Outdoor Recreation and Tourism*, 45, 100736. <https://doi.org/10.1016/j.jort.2024.100736>
- Needham, M.D., and J.J. Vaske. 2008. “Survey Implementation, Sampling, and Weighting Data.” In *Survey Research and Analysis: Applications in Parks, Recreation and Human Dimensions.*, edited by J.J. Vaske, 658. State College, Pennsylvania: Venture Publishing, Inc.
- Wu, M., Zhao, K., and Fils-Aime, F. 2022. “Response rates of online surveys in published research: A meta-analysis”, *Computers in Human Behavior Reports*, 7, 100206, <https://doi.org/10.1016/j.chbr.2022.100206>.

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.
