



## 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: 12/1/2024**

**PROJECT TITLE:** Visitor Impacts and Experiences Related to Wildlife Viewing in Yellowstone National Park

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

Increasing numbers of people are visiting parks and protected areas (PPAs) globally to observe diverse wildlife species. Encounters with large mammals, or "charismatic megafauna," are particularly sought after and serve as major motivators for visitors. This trend has brought increased attention to how visitor interactions impact wildlife behaviors and visitor experiences. While these wildlife encounters contribute to memorable visitor experiences, they also present challenges for managing human-wildlife interactions and preserving natural resources. As more visitors flock to PPAs year-round, the need to understand the effects of close wildlife encounters on animal behavior and ecosystem health grows. This project seeks to understand visitor motivations, behaviors, and their impact on wildlife to guide adaptive management strategies that protect both wildlife and high-quality visitor experiences in Yellowstone National Park.

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

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### **PARK OR PROGRAM LIAISON CONTACT INFORMATION:**

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#### PROJECT INFORMATION:

Where will the collection take place: Yellowstone National Park (YELL)

Sampling Period Start Date: 05/01/2025

Sampling Period End Date: 09/30/2025

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

Mail-Back Questionnaire       On-Site Questionnaire       Telephone Survey  
 Face-to-Face Interview       Focus Groups       Other (List)

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

#### 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 mission of the National Park Service (NPS) is, in part, to conserve the wildlife and natural processes within its units and provide for the enjoyment of these resources in a manner that will leave them unimpaired for the enjoyment of future generations. From its founding more than a century ago, the National Park Service (NPS) has been authorized to collect information that will "improve the ability of the Service to provide state-of-the-art management, protection, and interpretation of, and research on, the resources of the System" (54 U.S.C. 100701).

Specific to Yellowstone National Park's Strategic Priorities and Actions, this project supports Strategic Priority 2: Strengthening the Yellowstone Ecosystem and Resources. This project supports this strategy by contributing to improving our understanding of visitor impacts to resources in order to strengthen, preserve, and protect Yellowstone's natural and cultural resources, including their associated processes, systems, and values – in an unimpaired condition. While YELL has made strides in better understanding impacts to resources, improvements in indicators and models to illustrate the relations of visitors and resources through a socio-ecological system lens are needed. As part of YELL's efforts to understand and respond to visitor impacts to resources, the park has developed a Visitor Impacts to Resources Dashboard. This dashboard tracks resource conditions over time in an effort to preserve these resources. Indicators are still being refined and efforts to understand visitor use patterns in the Northeast corridor, a corridor frequented by wildlife viewers, will provide an understanding of the coupled socio-ecological system that park officials must manage. The dashboard is important for meeting park strategic priorities such as Priority 2. This information collection effort will help refine and improve dashboard indicators, as well as the park's approach for understanding visitor impacts to resources.

As one of the most iconic national parks in the world, YELL visitors seek unique wildlife viewing opportunities when visiting. This study seeks to understand Yellowstone visitor attitudes, beliefs, and actual and desired experiences

regarding wildlife viewing. This study will also evaluate visitor perceptions regarding possible impacts (e.g., such as roadside vegetation trampling and wildlife habituation) stemming from wildlife viewing. YELL managers will use this information collection to support the visitor experience, and visitor management as it relates to wildlife viewing in the park. This information will inform optimal visitor experiences for viewing wildlife in YELL, while also informing education and enforcement practices that will preserve park resources.

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## **SURVEY METHODOLOGY**

### **(A) Respondent Universe:**

Based on the 2023 NPS Visitor Use Statistics Report, YELL recorded 4,501,382 visits. The respondent universe for the on-site intercepts will be adult visitors (18 years old and older) that pull off and step out of their vehicle for wildlife viewing in Lamar Valley between 8:00 am and 5:00pm between May 1 – September 30, 2025.

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

A random sampling of visitors will be intercepted while visiting YELL at Lamar Valley vehicle pull-off. Visitors will be randomly intercepted at designated areas while out of their vehicles. Surveyors will be instructed to attempt to intercept every Nth group passing. N will be determined based on anticipated volume and number of intercepts required at each location. Two surveyors will be on site during the sampling period. Each day during the sampling period, sampling will occur during 5 hours between the hours of 8:00 am and 5:00 pm. Sampling hours will be randomly determined for each day. A total of 40 sample days (30 weekday and 10 weekend days) and 4 contingencies days are planned across the sampling period (Table 1). We anticipate higher sampling numbers in July due to peak visitor season. Table 1 is based on initial contacts, not completed surveys.

**Table 1. Example on-site intercept survey schedule with expected initial contacts**

		May 2025 Data Collection	June 2025 Data Collection	July 2025 Data Collection	August 2025 Data Collection	September 2025 Data Collection
Location	Day	8:00 am- 5:00 pm	8:00 am- 5:00 pm	8:00 am- 5:00 pm	8:00 am- 5:00 pm	8:00 am- 5:00 pm
Lamar Valley Pull-Offs	Monday	23	23	28	23	23
	Tuesday	23	23	28	23	23
	Wednesday	23	23	28	23	23
	Thursday	23	23	28	23	23
	Friday	23	23	28	23	23
	Saturday	25	25	3	25	25
	Sunday	25	25	30	25	25
	<b>TOTALS</b>	<b>166</b>	<b>166</b>	<b>200</b>	<b>166</b>	<b>166</b>
<b>Overall total</b>				<b>864</b>		

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### **(C) Instrument Administration:**

When visitors are outside of their vehicles for wildlife viewing, trained-university researchers will approach visitors and explain the purpose of the study and ask visitors if they are willing to participant in a survey. Willing participants will proceed to take the survey via a tablet that will be administered by the research technician. Visitors who refuse

to participate will be asked several non-response questions (see below). The survey will be anonymous, voluntary, and visitors can stop the survey at any time.

*"Hello, we are conducting a study about visitor motivations and behaviors regarding wildlife viewing here in Yellowstone National Park. Your participation is voluntary and your responses will be anonymous. In total, this study will take you about 12 minutes to complete. Would you be willing to participate?"*

- If NO: "Do you mind if I ask you just a couple of questions?
  - o Over the past 12 months, how many visits have you made to Yellowstone National Park?
  - o How many people were in your personal group today, including you?Thank you for your time and consideration. I hope you enjoy your visit."
- If YES: "Thank you for your willingness to assist with this study. Who in your group (who is at least 18 years old) has the next birthday? Would you be willing to participate in the study?"

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

Based on NPS traffic counter estimates in the region, we expect to contact at least 864 visitors during the sampling period. It is estimated that 70% (n=606) will be willing to participate in the surveys. These estimates are based on previous research with visitors to YELL conducted in the summer of 2020 (Freeman, et al., 2023). This same research employed an on-site survey in YELL and received a response rate of 73%. Given that this study is sampling a similar population in the same location, a response rate of 70% is believed to be an achievable goal. Of those who do not agree to participate in the on-site survey (n=142), we expect 90% to answer the non-response bias questions (n=233) with roughly 25 visitors completely refusing to participate in any part of the collection.

**Table 2: Response Rate**

Total Number of Visitor Contacts	Completed Onsite Surveys (70% of contacts)	Refusals (30% of contacts)	Completed Non-Response Surveys Soft (90% of refusals)	Hard Refusals (10% of refusals)
864	606	258	233	25

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For quantitative outdoor recreation related surveys, it is recommended that the sample size be approximately 300 respondents (Vaske, 2008). The current sample estimates for this study (at least 300 completed surveys) are with the recommended number and viewed as acceptable. The results of this collection will not be used to generalize any population beyond the individuals participating in this study during this sampling period or speculate about any areas beyond YELL. Sampling and recruiting efforts will conclude at the end of the sampling period.

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

All soft refusals will be asked to provide responses to the following questions, which will serve as the non-response bias check:

- If NO: "Do you mind if I ask you just a couple of questions?
  - o Over the past 12 months, how many visits have you made to Yellowstone National Park?
  - o How many people were in your personal group today, including you?Thank you for your time and consideration. I hope you enjoy your visit."

Using the same tablet computer database, the researcher will also capture additional observational information to aid with calculating potential non-response bias:

- time of contact,
- potential language barrier

The data from these questions and the observational data collected during the intercept (outlined above) will be used to determine any non-response bias. Any implications of non-response bias will be outlined in the final report and discussed with NPS managers and staff.

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**(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. The survey instrument was pre-tested in the format in which it will be delivered (i.e., tablet or online) to determine question understanding and length. The pre-tests were conducted by Social Scientists working on the project at Penn State. These Social Scientists identified students, researchers, and staff (5 in total) who were placed in a mock situation in which they found themselves at YELL. All pre-testers have worked, preformed research, or are very familiar with YELL. Based upon the pretest we were able to assess and correct skip patterns within the survey and gauge readability of the posed questions. We have estimated from these pre-tests that it will take up to one minute to introduce the survey and an additional 9 minutes to complete the intercept survey. For the visitors refusing to complete the survey it will take 30 seconds to ask nonresponse questions if the respondent does not want to participate in the full survey.

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**BURDEN ESTIMATES:**

We anticipate contacting a total of 864 individuals, resulting in a total of 839 completed responses (606 on-site surveys and 233 non-response surveys) for a total burden of 115 hours.

- On-site Survey: Of the 864 individuals we intercept, we expect 70% (n=606) to agree to participate in the survey. The survey will take 10 minutes to complete plus an additional one minute for the initial contact, resulting in a total burden of 111 hours.
- Non-response Survey: Of the 258 individuals who refuse to complete the on-site survey, we expect 90% (n=233) to complete the non-response survey. The non-response survey will take one minute to complete, including the initial contact and answer the 2 non-response questions, resulting in a total burden of 4 hours.
- The burden for the remaining visitors completely refusing to participate in the collection will not be estimated due to the de minimis nature of their participation.

**Table 3. Burden Estimates**

	Estimated Total Number	Completion Time (minutes)	Burden Hours
On-site Survey	606	11	111
Non-response survey	233	1	4
<b>Total</b>	<b>839</b>		<b>1150</b>

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**REPORTING PLAN:**

The study results for YELL will be presented in internal agency reports for NPS managers. Summary statistics will be provided. Additional comparative statistics may be used to examine potential differences by demographics or

attitude typologies. The report will be reviewed by YELL staff, and subsequently revised by the PI and team until the final report is processed and made public through the NPS. The report will be archived with the NPS Social Science Program for inclusion in the NPS Social Science Studies Collection as required by the NPS Programmatic Approval process. Hard copies will be available upon request.

## REFERENCES:

Freeman, S., Taff, B. D., Lawhon, B., Benfield, J. A., Kreye, M., Newton, J., & Newman, P. (2023). The impact of message framing on wildlife approach during ungulate viewing experiences in the Greater Yellowstone Ecosystem. *Journal of Interpretation Research*, 28(1), 7-24.

National Park Service. (2021). Yellowstone visitation statistics for May 2021.

Vaske, J. J. (2008). Survey research and analysis: Applications in parks, recreation and human dimensions. (No Title).

## 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.