



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: April 30, 2021

PROJECT TITLE: Utah Night Sky Recreationists' Experiences

ABSTRACT: (not to exceed 150 words)

Utah has the darkest skies in the lower 48 states, the world's first International Dark-Sky Association designated park, and the highest concentration of dark sky certified places globally. This study develops a better understanding of the preferences and experiences of visitors who come to select National Parks in Utah to see the night sky. The study also develops a better understanding of these visitors' trip-related expenditures. Data on visitor experiences and trip-related expenditures related to viewing night skies will help NPS units provide quality outdoor recreation opportunities to the public. An intercept survey, administered at select national parks within Utah, will be used to collect information on night sky trip planning, night sky experiences, support for management actions, and night sky specific visitor spending patterns, from visitors in four National Parks. The data will be used to inform night sky recreation management in southern Utah.

PRINCIPAL INVESTIGATOR CONTACT INFORMATION:

NAME: Jordan Smith
TITLE: Director, Institute of Outdoor Recreation and Tourism
AFFILIATION: Utah State University
ADDRESS: 5215 Old Main Hill
Logan, Utah 84322
EMAIL: Jordan.smith@usu.edu **PHONE:** (435) 797-9174

PARK OR PROGRAM LIAISON CONTACT INFORMATION:

NAME: Adam Beeco
TITLE: Social Scientist and Overflights Planner, Natural Sounds & Night Skies Division
AFFILIATION: National Park Service
ADDRESS: 1201 Oakridge Dr., Suite 100
Fort Collins, CO 80525
EMAIL: adam_beeco@nps.gov **PHONE:** (970) 267-7177

PROJECT INFORMATION:

Where will the collection take place? 1) Arches National Park, (2) Bryce Canyon National Park,(3) Canyonlands National Park, (4) Natural Bridges National Monument, (5) Canyonlands National Park, and (6) Hovenweep National Monument		
Sampling Period Start Date: April 15, 2021		Sampling Period End Date: October 31, 2021
Type of Information Collection Instrument: (Check ALL that Apply)		
<input type="checkbox"/> Mail-Back Questionnaire	<input type="checkbox"/> On-Site Questionnaire	<input type="checkbox"/> Telephone Survey
<input type="checkbox"/> Face-to-Face Interview	<input type="checkbox"/> Focus Groups	<input type="checkbox"/> Other (List): Online/Email Questionnaire
Will an electronic device be used to collect information?		<input type="checkbox"/> No <input type="checkbox"/> 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.

Visitation to parks in the National Park Service’s Southeast Utah Group (SEUG) has dramatically increased in recent years. Between 2010 and 2020, for example, Arches National Park (ARCH) and Canyonlands National Park (CANY) have both experienced unprecedented increases in recreational visitation (ARCH 79.1% and CANY 69.3%, respectively). This increased night-time visitor use has expanded the peak and shoulder seasons at ARCH and CANY. Southeast Utah Group (SEUG) park managers are currently considering night sky recreation visitor use management strategies related expectations, motivations, experiences, and spending behaviors.

To address the lack of information about night skies recreationists, SEUG managers have requested a visitor use survey at the following night sky certified parks: (1) Arches National Park, (2) Bryce Canyon National Park,(3) Canyonlands National Park, (4) Natural Bridges National Monument, (5) Canyonlands National Park, and (6) Hovenweep National Monument. This information will be instrumental in visitor use management efforts related to sustainability of quality night sky experiences and communication plans in parks in parks known for night skies recreation.

To facilitate the development of potential visitor use management strategies and upcoming planning processes, an on-site survey will be used to collect information about visitors experiences and trip characteristics to gauge visitor support for visitor use management strategies. Understanding visitor spending behavior in local communities in conjunction with visitor use characteristics assist in parks planning their visitor use management strategies to minimize negative or enhance positive impacts to visitor spending in nearby communities.

SURVEY METHODOLOGY

(A) Respondent Universe:

All adults (18 years of age and older) visiting one of the following six Utah park units: (1) Arches National Park, (2) Bryce Canyon National Park, (3) Canyonlands National Park, (4) Natural Bridges National Monument, (5) Canyonlands National Park, and (6) Hovenweep National Monument.

Sampling Plan / Procedures:

Sampling of potential respondents will occur on-site at locations where people tend to congregate during the evening hours in each NPS unit (e.g., visitor centers, park entrance stations, campgrounds, and parking areas). A total of 56 days (approximately 14 days at four NPS units), will be stratified by day of the week. Our estimates in Table 2, are based on approximately 14 surveys times 2 research technician per sampling day would equal 32 surveys (192 per site). Surveys will be conducted at multiple locations in each of the NPS sites listed below. The sample period and number of expected surveys per location is listed in Table.

- **Arches National Park:** Devils Garden Campground, visitor center, Panorama Point, and parking areas throughout the park.
- **Bryce Canyon National Park:** North Campground, Sunset Campground, visitor center and entrance station area, and parking areas throughout the park.
- **Capitol Reef National Park:** Fruita Campground, visitor center, and parking areas throughout the park.
- **Natural Bridges National Monument:** Natural Bridges Campground, visitor center, entrance station area, and parking areas throughout the monument.
- **Canyonlands National Park:** Squaw Flat Campground, Needles Visitor Center, Island in the Sky Visitor Center, and parking areas in the Needles district of the park.
- **Hovenweep National Monument:** Hovenweep Campground, Hovenweep Visitor Center, and parking areas throughout the monument.

Table 1. Example On-site Sampling Schedule

Sample Period	Sampling Days Per Site		Estimated Number of Visitor Contacts	
	Number of sites Sampled	Sampling days per site	Visitor Contacts Per Day	Total Number Visitor Contacts
June/July	4	6	170	1,020
August/September/October	4	8	230	1,380
TOTAL	0	0	0	0

(B) Instrument Administration:

All Visitors that agree to participate will be asked to complete an on-site survey with the researcher. If the visitor agrees to participate, the electronic survey will be self-administered using an iPad. If an individual refuses to participate, they will be thanked and will be asked to answer three non-response bias check questions. Researchers will also record group characteristics (i.e., group size, children present or not present, gender) that will be used as the non-response checks for hard refusals.

Trained technicians working under the supervision of the PI will use the following example script to make the initial contact with potential respondents:

Hello, my name is _____. I am conducting a survey to help [PARK NAME] NPS managers understand night sky recreationists behaviors and motivations in order to provide quality night sky experiences. Your participation is completely voluntary, and your responses will remain anonymous. In total, it should take about ten minutes to complete the survey. Would you be willing to participate?

➔ **IF YES** –Thank you. Before we start, who in your group is at least 18 years old and had the most recent birthday? Would you be willing to participate in the study?

➔ **IF YES - start the survey**

➔ **IF NO:** Do you mind if I ask you three quick questions?

➔ **IF YES:** (conduct non-response bias check)

- “What is your home zip code? OR if you are not a US resident, what is your home country?”
- “What is your primary activity on this trip to [PARK NAME]?”
- “In what year were you born?”

➔ **IF NO:** Would you be willing to participate later by email?

➔ **IF YES:** Great! Please provide your email address here.

➔ **IF NO:** Thank you for your time and consideration. I hope you enjoy your visit.

(C) Expected Response Rate / Confidence Level:

On-site Survey

We anticipate contacting approximately 2,400 visitors during the sampling period and estimate that 65% will agree to complete the on-site survey. The anticipated onsite survey response rates by unit are shown in Table 3. These estimates are based on recent visitor use studies in national parks. For instance, in a project in the String and Leigh Lakes area of Grand Teton National Park in 2018 by D’Antonio and colleagues, response rates were about 87%. Sample sizes of about 400 are recommended for quantitative outdoor recreation research. This will provide a 95% confidence level with a confidence interval of about +/-5%. Sampling and recruiting will conclude at the end of the sampling period.

Table 3. Anticipated Onsite Survey Response Rates

Location	Total Number of Visitor Contacts	Completed Onsite Surveys (65% of contacts)	Accepting Invitation for Email Surveys (25% of contacts)	Completed Non-Response Surveys (80%soft refusals)	Hard Refusals (20%soft refusals)
Arches	400	260	100	112	28
Bryce Canyon	400	260	100	112	28
Capitol Reef	400	260	100	112	28
Natural Bridges	0	260	100	112	28
Canyonlands	0	260	100	112	28
Hovenweep	200	130	50	56	14
TOTAL	0	0	0	0	0

E-mail Survey

Assuming a 25% response rate from 550 who provide emails, we are anticipating 275 completed questionnaires SEUG visitors (Table 4).

Location	Total Number of Visitor Contacts	Accepting Invitation for On-line Surveys (25% of contacts)	Estimated Completed On-line Surveys (50%)
Arches	400	100	50
Bryce Canyon	400	100	50
Capitol Reef	400	100	50
Natural Bridges	0	100	50
Canyonlands	0	100	50
Hovenweep	200	50	25
TOTAL	0	0	0

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

Refusals will be recorded, reported, and analyzed using non-response bias questions and observational data (i.e. group size, children present or not present, gender).

- What is your home zip code? OR if you are not a US resident, what is your home country?"
- "What is your primary activity on this trip to [PARK NAME]?"
- "In what year were you born?"

Responses from the respondents will be compared with non-respondents using the available data, and any non-response bias and potential implications for park planning and management will be reported.

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

This survey uses questions from the NPS Pool of Known Questions and is designed to complement the Interagency Visitor Use Management Framework. The instrument was developed collaboratively with managers from the NPS to ensure the instrument made sense for the site and the planning needs of national park units in southern Utah. The final instrument was tested by faculty and graduate students at Utah State University's Institute of Outdoor Recreation and Tourism for burden timing, clarity, and conceptual accuracy. NPS employees at the Natural Sounds and Night Skies Division also reviewed the final instrument for clarity and conceptual accuracy.

BURDEN ESTIMATES

We anticipate that the combined burden for this collection will be 2,321 completed responses and 600 hours. Of the 2,400 visitors will be intercepted on site the burden estimate includes:

- **Onsite Survey - 500 hours:** 1,430 completed onsite responses x 21 minutes (initial contact and time to complete survey)
- **Email Survey - 69 hours:** 275 completed responses x 15 minutes (initial contact, time to access the survey through email and time to complete survey)
- **Non-response Survey - 31 hours:** 616 completed responses (initial contact and time to complete survey)

Table 4. Burden Estimates

	Completed Responses	Completion Time (minutes)	Burden Hours (rounded up)
On-site Survey*	0	21*	500
Email Survey	275	15**	69
On-site non-response survey	0	3	31
Total burden requested under this ICR:	0		0

*Includes initial contact time of one minute is added to the completion time.

**Includes initial contact time of one minute and 3 minutes to access on-line survey through email.

REPORTING PLAN:

NPS personnel will be continuously updated throughout the process as the need arises. Project deliverables include a presentation, fact sheet, and webinar. A final technical report will be delivered to NPS managers detailing night sky recreationists’ perceptions, experiences, and trip-related expenditures. Data will also be shared with the NPS Natural Sounds and Night Skies Division and individual parks as appropriate.

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.
