



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 10, 2017

PROJECT TITLE: Glacier Bay National Park Backcountry/Wilderness Visitor Use Study

ABSTRACT: (not to exceed 150 words)

As in many National Parks, visitation at Glacier Bay National Park (GLBA) is increasing, with current visitation levels reaching historic highs. These increases in visitation include potential increases in backcountry use due to the 2011 addition of ferry service to Gustavus, AK, the gateway community for GLBA. However, little is currently known about dispersed backcountry visitor use and characteristics in the park. This study aims to characterize wilderness visitation in GLBA to inform development of a Wilderness Stewardship Plan. Visitor surveys will be used to collect data on visitor demographics, behavior, and expectations. Additionally, GPS-based tracking of visitors will be used to characterize the spatial behavior of kayakers in GLBA backcountry areas. This data will be used to inform development of indicators of quality for visitor experience, characterize visitor use and travel patterns relative to natural resource conditions, and inform the development of a quantitative survey of GLBA backcountry/wilderness users.

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PROJECT INFORMATION:

Where will the collection take place? **Glacier Bay National Park (GLBA)**

Sampling Period Start Date: June 1, 2017

Sampling Period End Date: September 1, 2017

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

- Mail-Back Questionnaire Face-to-Face Interview Focus Groups
 On-Site Questionnaire Telephone Survey On-line/Web based Survey
 Other (List) Direct mail link to online questionnaire

Will an electronic device be used to collect information?

- No Yes – Type of Device: Apple Ipad/Personal home computer
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SURVEY JUSTIFICATION:

Social science research in support of park planning and management is mandated in the NPS Management Policies 2006 (Section 8.11.1, "Social Science Studies"). The NPS pursues a policy that facilitates social science studies in support of the NPS mission to protect resources and enhance the enjoyment of present and future generations (National Park Service Act of 1916, 38 Stat 535, 16 USC 1, et seq.). NPS policy mandates that social science research will be used to provide an understanding of park visitors, the non-visiting public, gateway communities and regions, and human interactions with park resources. Such studies are needed to provide a scientific basis for park planning and development.

Glacier Bay National Park (GLBA) protects 3.3 million acres of mountains, glaciers, rainforest, and coastline within Alaska's Inside Passage and is part of a 25-million acre world heritage site. Visitation to Glacier Bay has exceeded 500,000 visits annually since 2013 and visitation increased over 20% from 2012 to 2015 with 551,353 recreation visits, a historic high. Although the bulk of these visitors are cruise ship passengers, GLBA staff has noted shifting patterns, and a potential increase, in backcountry/wilderness use since the Alaska Marine Highway System added ferry service to Gustavus in 2011.

To provide experiential education to students and address the information needs of NPS managers, Utah State University (USU) researchers with the S.J. & Jessie E. Quinney College of Natural Resources, in cooperation with NPS, will implement a visitor use study of backcountry/wilderness users in GLBA. The purpose of this research opportunity is to better understand users in GLBA's backcountry/wilderness in order to inform the park's upcoming backcountry/wilderness management plan that will address a variety of visitor related issues including visitor experience (e.g. encounter rates, visitor expectations, emerging activities), vessel quotas, and science based ecosystem management.

Currently, there is a lack of social science information related to backcountry use at GLBA and little is known about visitor use and characteristics, particularly associated with dispersed activities in designated wilderness. USU will

develop and conduct a visitor study to understand independent backcountry visitors who register at the Visitor Information Station (VIS), non-independent backcountry visitors (i.e., tour vessel, charter, flight-seers, mountaineers, Gustavus tourism business clients), and gateway community backcountry users. Through this collection, USU students will gain an in-depth understanding of visitor demographics, experience, expectations, needs, and use patterns while providing the NPS with data that will be used by the at park's management team inform the development of a Wilderness Stewardship Plan.

These data will be used to provide clear rationale for robust indicators and a range of objective-supported standards that the NPS can choose to incorporate within the backcountry plan. Specifically, this study will collect the following data about GLBA's wilderness visitors:

- **Demographics:** to develop a clearer profile of backcountry/wilderness users and to understand who isn't coming to the park and why.
- **Behavior:** GLBA has limited information about baseline backcountry visitor behavior, and limited perspective and feedback on how visitors are currently using the backcountry. Additionally, GLBA has limited data about typical backcountry trip parameters and what motivates and/or drives visitor choices.
- **Expectations and Desires:** GLBA has limited perspective on whether visitors are happy with their current experiences and/or what might improve their experience in the future within possible change parameters.

This study will be administered during the summer of 2017 and will include qualitative and descriptive data collection in order to:

- To inform development of potential indicators of quality for visitor experience.
- Describe visitor use travel patterns and related natural resource conditions.
- Inform development of a future quantitative survey of GLBA backcountry/wilderness users.

SURVEY METHODOLOGY:

(A) Respondent Universe:

The respondent universe for this collection will be all adults (18 years and older) within the following subgroups:

- On-site survey and GPS Tracker: All non-guided, permitted independent backcountry visitor groups (multiday overnight trips) to Glacier Bay proper who actively recreate in wilderness, and who register at the Visitor Information Station (VIS) from June 1 to September 1, 2017.
- Guided tours Survey - All visitor groups who take commercial “dayboat” or “mini-expedition boats” from June 1 to September 1, 2017.
- Community Survey -All gateway community backcountry visitors (Gustavus residents – locals who use the park primarily, plus Gustavus business owners sending their clients into the park’s backcountry), from June 1 to September 1, 2017.

(B) Sampling Plan / Procedures:

On-site survey and GPS Tracker

Due to relatively low visitation (based upon personal communication with park staff) there were 291 total groups between June 1, 2016 and September 1, 2016¹. Based upon this, the graduate student on the project will attempt to intercept all backcountry visitor groups to maximize sample size. As such, this collection will be a census, rather than a stratified sample. All backcountry visitor groups will be intercepted after picking up their Backcountry permit inside the Visitor Information Station (VIS). The primary put-in for backcountry kayakers visiting GLBA is proximate to the VIS.

Guided tours Survey

The “dayboat” is a chartered catamaran vessel that carries visitors from Bartlett Cove to upbay areas of the park one time each operating day (June 1-September 1). A park interpreter is present on this boat during each trip, and provides interpretation to the visitors beginning about 15 minutes after the boat departs. An average of 75 visitors² use the dayboat each operating day (75 visitors x 90 operating days = 6,750 visitors). The interpreter on board will be trained in survey distribution procedures, including a random sampling procedure where the “nth” visitor to be surveyed will be chosen from a random number table. We anticipate selecting between 6-8 visitors to take the survey on each boat trip (n= 540 visitors). Interpreters will be provided with a surveys packet that will include a questionnaire and non-response instruments. Interpreters will distribute surveys instrument (or non-response bias surveys) to the selected visitors just prior to the boat is leaving the dock. Should the interpreter not be available as per the sampling schedule the graduate student on the project will administer the survey.

Mini-expedition vessels are chartered vessels that may arrive at GLBA from Skagway or other ports. Roughly 20 of these vessels enter the park each season, carrying an average of 100 (but up to 200 visitors) to upbay areas of the park (n=2,000 visitors). A park interpreter is also present for some portion of each mini-expedition trip. A random sampling procedure where the “nth” visitor will chosen from a random number table, resulting in 5 visitors per boat chosen to take the survey (n=400 visitors). Interpreters will distribute surveys instrument (or non-response bias surveys) to the selected visitors as the boat is leaving the dock after safety announcements are made and before the interpretive program begins.

Community Survey -

¹ ¹Tania Lewis, GLBA Wildlife Biologist, personal communication

² ²Sara Doyle, personal communication

All of the community members (n=264) in the town of Gustavus will be mailed a postcard addressed to “resident.”

Table 1. Estimated Number of Visitor Contacts* during Sampling Period

Respondent Group	Estimated Number of Visitor Contacts			
	June	July	August	Total
On-site survey and GPS Tracker	88	135	68	291
Guided tours Survey	282	432	226	940
Community Survey	264	N/A	N/A	264
Total				1,495

*Monthly estimates for all backcountry user groups are based on 2016 monthly visitation rates for independent visitors (June = 30% of all visitors, July = 46% of all visitors, August = 24% of all visitors).

(C) Instrument Administration:

On-site Survey and GPS Tracker

The independent backcountry visitor survey will be administered at the VIS through direct personal contact by USU student researcher. USU researchers will be present and surveying visitors on site every day from 8am to 5pm during the sampling period. NPS staff will be trained in all aspects of survey administration and may help when necessary.

Every person entering the visitor center during the sampling period will be asked to participate in the study. Only one member per group will be contacted to complete the on-site survey and paired GPS-tracking, however if multiple members of the group are over the age of 18, the person with the closest, upcoming birthday will be selected for participation to minimize the potential for leader bias. Visitors will be approached inside the VIS after they receive their backcountry permit. After completion of the survey, the respondent will be given instructions for placing a small GPS unit in their kayak for the duration of their trip. These respondents will also be given instructions for return of the unit to the VIS upon completion of their trip. In the event that the visitor mistakenly leaves the park before returning the GPS, each unit will be equipped with instructions for mail-back return.

Visitors selected for participating in the survey will be read the following script:

“Hello, my name is [Researcher’s Name]. I am conducting a survey for the National Park Service to understand more about your experiences in the park today. The answers you provide based on your perception of the park will help inform future management actions. Would you be willing to answer a few questions? Your participation is voluntary and all responses will be kept anonymous.

→If they refuse we will ask the non – response questions (see section e).

→If the non-response questions are refused, we will thank them for their time and end contact.

→If they accept, we will then ask, “have you (or – has any member of your group) been asked to participate in this survey before?”

→If “YES” (already asked to participate) then, “Thank you for agreeing to participate in this study. Have a great day.”

→If “NO” (have not been previously asked to participate) then, “Thank you for agreeing to participate. Are you at least 18 years old (or- who in your group is at least 18 years old and has the next birthday)?

→Proceed with survey

Guided Tours Survey

Surveys will be administered to a random sample of visitors on the dayboat (n=75 visitors per trip) and mini-expedition vessels (100 visitors per trip). Surveys will be administered by park interpretive staff present on the boat or a graduate student trained in the sampling protocol. Surveys will be administered to every nth visitor on pre-selected days before visitors arrive in GLBA backcountry (for dayboat users, after safety instructions are given; for mini-expedition vessels, enroute to the park). Surveys will be returned to park staff, who will provide completed surveys to researchers at the end of the season.

Local community members

A postcard addressed to “resident” will be mail to each active P.O. Box (n=264) in Gustavus, AK. The post card will have the online link, unique access code and instructions explaining how to access the survey. If residents do not have access to a computer, they will be instructed to go to the VIS to exchange the postcard with the USU researcher or NPS staff in order to receive a paper survey.

A reminder postcard will be placed in all P.O. Boxes two weeks after the initial postcards are sent out that will also include non-response bias questions in a mail-back format.

(D) Expected Response Rate / Confidence Level:

We plan to contact a total of 1,495 potential participants either on-site or by direct mail during the sampling period. Based upon previous research we are estimating that 74% of all on-site visitors contacted will be willing to complete the survey upon intercept at the Visitor Information Station or one of the chartered vessels. We estimate that 50% (n= 132) of residents who are mailed a postcard with a link to the online survey will be willing to complete the survey, either online or on paper.

The response rate from all direct contacts (on-site and guided tours) is estimated to be at least 74% (Table 3). This number is based upon recent research by Newman, Taff, Newton, & Abbott; 2015 who also used paired survey and GPS-tracking techniques. Using direct contact methods and Ipad based surveys in Grand Teton National Park resulted, this group achieved response rates of 73% when sampling visitor in vehicles and 85% when sampling hikers. Additionally, research conducted at GLBA in 2016, where all backcountry camping groups were asked to take maps, mark locations where they camped, and return the maps resulted in a 74% return rate (Tania Lewis, GLBA Wildlife Biologist, personal communication).

The expected response rate for the online questionnaire is 50%. This response rate is based on the work of Vaske (2008), who suggests response rates for online surveys should be between 25-50%). We expect response rates to the direct mail link for local residents to be on the higher end of this range (50%) due to the small local population and the productive relationship the park fosters with the residents. We also expect relatively high cooperation from outfitters and guides as park staff have been negotiating inclusion of this survey into their annual operating plan (Sara Doyle, GLBA Recreation Planner, personal communication; 2016).

Table 2 Expected On-site Acceptance Rates

Location	June		July		August	
	Number of visitors		Number of visitors		Number of visitors	
	On-site acceptance	Non-Respondents	On-site acceptance	Non-Respondents	On-site acceptance	Non-Respondents
On-site survey and GPS Tracker	65	23	100	34	50	18
Guided tours Survey	209	73	320	102	167	59
TOTAL	0	0	0	0	0	0

Table 3 Expected Response rates based upon total estimated all visitors contacted

Respondent Group	Initial Contacts	Completed Responses 74%	All refusals 26%	Non-response survey 35%	Hard Refusals 65%
On-site survey and GPS Tracker	291	215	76	26	50
Guided tours Survey	940	696	244	85	159
Subtotal	0	0	0	0	0

	Initial Contacts	Completed Responses 50%	All refusals 50%	Non-response survey 35%	Hard Refusals 65%
Community Survey	264	132	132	46	86
Combined TOTAL	0	1,043	452	157	295

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

The following four questions will be used in a non-response bias analysis. These questions will only 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 a non-response log form.

1. What is your main constraint for not participating in this survey?
2. What is your home ZIP code? _____
OR, what country are you from? _____
3. During this trip, do you plan to use (are you using) a paid guide? (Please check one)
 YES
 NO

4. Please tell us what backcountry locations you plan on visiting during your trip to GBNP. (Researchers will fill out the table below based on visitor responses. No map will be shown).

Number to Left Corresponds to Location on Reference Map	Yes	No	Not Sure
1. Beardslee Islands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. East Arm Glacier Bay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. West Arm Glacier Bay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Non-motorized waters of Glacier Bay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Lower Bay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Upland/alpine areas of the park	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Dundas Bay, Taylor Bay/Fern Harbor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Outer Coast	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Responses to these questions will be recorded and the results will be reported. Any implications for applicability of survey results to generalizations about the study population will be discussed.

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

The survey questions were tested with <9 people who represent the GLBA user type and peer reviewed through extensive communication over several months with GLBA park staff and staff from the National Park Service Social Science Branch. The peer-review was instrumental in developing the motivations scale specific to the park, as well as modifying questions to include park-specific visitor destinations and desired experiences.

BURDEN ESTIMATES:

We plan to contact a total of 1,495 potential participants for this collection. The overall number of responses (n=1,200) in this collection will include completed non-response bias survey and on-site or on-line questionnaires.

	Total Number of Responses
On-site survey and GPS Tracker	241
Guided Tours Survey	781
Community Survey	178
Total	0

The burden for each subgroup is described below.

On-site survey and GPS Tracker

The initial contact time of no more than five (5) minutes will be used to explain the purpose of the survey and to provide instruction for the use and return of the GPS tracking device (291 x 5 minutes = 24 hours). We expect that 74% of the on-site visitors will agree to complete the survey and GPS-based tracking. The on-site visitor questionnaire is expected to take an additional 10 minutes to complete (215 completed responses x 10 minutes = 36 hours). Visitor will be instructed to carry the GPS tracker in their gear bag that is typically carried on the front of their kayak. The tracker will remain in the bag for the duration of the trip and returned at the end. Based upon our estimated response rate of all of the people that refuse to take the survey (n=76), we are anticipating that at least 35% (n=26) will agree to answer the non-response check questions and 65% (n=50) will give a “hard refusal” and walk away. The time to complete the non-response questions is estimated to take about two minutes (26 x 2 minute = 1 hour).

Estimated Respondent Burden for On-site survey and GPS Tracker

Estimated Total Number		Estimation of Time (minutes)		Estimation of Buren (hours)	
Initial Contacts	291	Initial Contact	5	Initial Contact	24
Nonresponse Survey	26	Nonresponse Survey	2	Nonresponse Survey	1
Completed Responses	215	To Complete Response	10	To Complete Response	36
				Total	61

Guided Tours Survey

We plan to approach 940 potential participants within the various guided tours samples. We expect that the initial contact to explain the purpose of the survey to take no more than 3 minutes (940 x 3 minutes = 47 hours). From this sample population we expect that 74% (n=696) will agree to complete the on-site survey. This will take an additional 10 minutes to complete (696 x 10 minutes = 116 hours). We expect that 26% (n = 244) of all visitors asked to participate will refuse; and for those individuals, we will record their reason for refusal and ask them to answer the non-response check questions. Based upon our estimated response rate of all of the people that refuse to take the survey 35% (n=85) will agree to answer the non-response check questions and 65% (n=156) will give a “hard refusal”

and walk away. The time to complete the non-response questions is estimated to take about two minutes (85 x 2 minutes = 3 hours).

Estimated Respondent Burden for Guided Tours Survey

Estimated Total Number	
Initial Contacts	940
Nonresponse Survey	85
Completed Responses	696

Estimation of Time (minutes)	
Initial Contact	3
Nonresponse Survey	2
To Complete Response	10

Estimation of Buren (hours)	
Initial Contact	47
Nonresponse Survey	3
To Complete Response	116
Total	166

Community Survey

We plan to contact 264 potential participants (all of the active P.O. Boxes) within the community of Gustavus. We expect that the initial contact of the visitor interaction with the postcard, which explains the purpose of the survey to take no more than 1 minute (264 x 1 minute = 4 hours). From this population we expect that 50% (n=132) will agree to complete the online survey. This will take an additional 10 minutes to complete (132 x 10 minutes = 22 hours). We expect that 50% (n = 132) of community members will refuse to participate in the study. For those individuals, we will record their reason for refusal and ask them to answer several non-response check questions, provided via a follow-up postcard, which will be recorded as a separate non-response survey. Based upon our estimated response rate of all of the people that refuse to take the survey (n=132), we are anticipating that 35% (n=46) will return the non-response check questions and 65% (n=86) will give a “hard refusal” will not respond at all. The time to complete the non-response questions is estimated to take about two minutes (46 x 2 minutes = 2 hours).

Estimated Respondent Burden for Community Survey

Estimated Total Number	
Initial Contacts	264
Nonresponse Survey	46
Completed Responses	132

Estimation of Time (minutes)	
Initial Contact	1
Nonresponse Survey	2
To Complete Response	10

Estimation of Buren (hours)	
Initial Contact	4
Nonresponse Survey	2
To Complete Response	22
Total	28

The total combined estimated respondent burden for this collection is estimated (initial contact + acceptance + completed surveys + nonresponse bias surveys) to be 255 hours.

Total combined estimated respondent burden

Total for all Responses	
	Estimated burden hour
Completed On-Site/GPS Surveys	61
Guided Tours Survey	166
Completed Community Survey	28
Total	0

REPORTING PLAN:

Results, including descriptive statistics (frequency distributions of visitors per month, duration of trips, and visitor motivations) as well as maps depicting visitor travel routes and spatial statistics (e.g. visitor use density) will be presented to GLBA in the form of a Natural Resource Technical Report. Results will be published in scientific journal as appropriate.

References

Newman, P., Taff, D., Newton, J., & Abbott, L. (2015). Informing visitor use strategies for the Moose-Wilson Corridor, Grand Teton National Park: Technical report-summer 2014 data. Available from: <https://www.nps.gov/grte/learn/management/upload/Final-PSU-Report-and-Review.pdf>

Vaske, J.J. (2008). Survey research and analysis: Application in parks, recreation, and human dimensions. State College, PA: Venture Publishing, Inc.

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.
