



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: 5/8/2017

PROJECT TITLE: Visitor experiences at Pictured Rocks National Lakeshore - Miners Beach and Sand Point

ABSTRACT: (not to exceed 150 words)

Pictured Rocks National Lakeshore (PIRO) has experienced increased visitation in the last several years and this is projected to continue. Miners Beach is frequently used by non-commercial visitors and commercial groups alike. Managers have requested this survey to evaluate visitor perceptions of crowding and the management strategies used to address crowding on Miners Beach and to assess potential intra-site displacement. To assess visitor perceptions of density and management preferences, onsite questionnaires will be distributed at both Miners and Sand Point Beaches. Study findings will be used to provide baseline data that managers will be used to understand visitor perceptions of crowding and the thresholds for visitor capacity.

PRINCIPAL INVESTIGATOR CONTACT INFORMATION:

Name: Ingrid E. Schneider, Professor
Affiliation: University of Minnesota, Dept of Forest Resources
Address: 1530 Cleveland Ave N, St Paul, MN 55108
Phone: 612 624 2250
Email: ingridss@umn.edu

PARK OR PROGRAM LIAISON CONTACT INFORMATION:

Name: Bruce Leutscher, Chief, Science & Resource Stewardship
Affiliation: Pictured Rocks National Lakeshore
Address: P O Box 40; Munising MI 49862
Phone: 906 387 2680
Email: Bruce_leutscher@nps.gov

PROJECT INFORMATION:

Where will the collection take place? Pictured Rocks National Lakeshore (PIRO) Miners Beach & Sand Point Beach

Sampling Period Start Date: June 1, 2017

Sampling Period End Date: September 30, 2017

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

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

Will an electronic device be used to collect information? No Yes - Android tablets:

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.

Like other NPS units, Pictured Rocks National Lakeshore (PIRO) has experienced increased visitation in the last several years and this is projected to continue into the future. Beyond increased NPS visibility with its Centennial celebration, PIRO receives additional promotion through the successful Pure Michigan marketing campaign. This increased use may impact the quality of visitor experience or the condition of the natural resources. Related to this, stakeholders have expressed concerns regarding the number and type of users on the beaches, particularly at Miners Beach.

Managers have requested this survey to evaluate visitor perceptions of crowding and the causes of potential displacement from Miners Beach to Sand Point Beach. Management strategies are needed to mitigate the issues related to crowding on Miners Beach as well as to assess the effects intra-site displacement to Sand Point Beach. Sand Point Beach is the closest comparable beach to Miners Beach and is currently less frequently used by commercial groups. Managers are concerned about the over-use of Miners Beach, resource damage and increased transportation issues.

This effort is needed to provide a better understanding of visitor's acceptance levels for potential management actions elevate the pressures of crowding to improve visitor experiences and safety as well as staying true to PIROs mission.

Study findings will provide baseline data to:

- Understand current conditions of visitor use and expectations,
- Inform the ongoing visitor use management planning processes,
- Advise potential management strategies to maintain high quality visitor experiences,
- Protect natural resources with potential use redistribution, site hardening, and infrastructure improvement, and

- Inform site planning by providing data to inform potential indicators, thresholds, and visitor capacity.

Miners Beach is frequented by non-commercial visitors and commercial visitor groups, primarily kayakers. Given the different nature of their experiences at Miners Beach, understanding members of each group and their visitor perceptions is important. For the purpose of this collection, onsite questionnaires will be distributed to visitors at Miners Beach and Sand Point Beach to assess individual and trip/visit characteristics, activities, perceptions of beach conditions, crowding and park unit management actions. Commercial visitors (namely kayakers) at Miners Beach will be contacted on their shuttle buses to collect emails for an email questionnaire and get non-response data

SURVEY METHODOLOGY:

(A) Respondent Universe:

The respondent universe for this collection is all adult (18 and older) visitors during daylight hours (typically 6 am to 10 pm) to Miners Beach and Sand Point Beach, as well as all adult commercial visitors. Miners Beach visitors and commercial visitors will be sampled throughout the summer season and early fall 2017 (June 1 to Sept 30). Sand Point Beach visitors will be sampled only during the peak visitation period (July and August) to address potential-displacement.

(B) Sampling Plan / Procedures:

Based upon NPS Visitor Use Statistics, there were approximately 777,428 visitors to the PIRO Lakeshore in 2016 (National Park Service, 2017).

Miners Beach & Sand Point Beach Visitors

Sampling will occur in the same way at both Miners and Sand Point beaches. Sampling visitors across the summer and throughout the week and day will be an attempt to survey a representative sample of visitors. For example, we will sample between throughout the week with 4-hour shifts (6 to 10 am, 10 am to 2 pm, 2 to 6 pm and 6 to 10 pm).

A systematic sampling method will be used to intercept visitors. Survey administrators will visually divide the beach between the land and water in half and walk down the middle of the beach, alternating the ends of the beach for starting points. The 3rd group on the beach closest to land/parking lot will be approached, greeted, and then invited to complete the questionnaire. To randomize respondent selection within each group approached, the visitor over 18 years old with the most recent birthday will be asked to participate. The selected respondent will be asked to complete the electronic version of the questionnaire on a handheld tablet (provided). For those not comfortable with an electronic questionnaire, a paper version will be available. At the end of the contact with the person completing the questionnaire, the survey administrator will continue the selection pattern of asking the 3rd group on the beach closest to the land/parking lot to participate. Once personnel have reach the end of the

beach, they will again visually divide the beach in half, walk back down the middle of the beach, but this time they will select the third group closest to the water. This pattern will continue throughout the sampling period.

At Miners Beach, thirty-two sampling days will occur during the daylight hours on each randomly assigned day during the sampling period (Table 1). Sand Point Beach is of interest for potential displacement from Miners Beach, and therefore sampling will occur only during peak season (July and August) when displacement is most likely. Twenty-two sampling days will occur during the daylight hours at Sand Point Beach on each randomly assigned day during peak season of July and August (11 days each month; Table 1).

Commercial Visitors

Based on the shuttle bus pick-up data (June- September 2016), at least 4,256 visitor groups rode the shuttle bus as transport back to their parked cars. One person from all commercial visitor groups (n=4,256) will be asked to complete a short nonresponse survey and provide their names and email addresses during the 32 sampling day sampling period.

Table 1. Example On-site Sampling Schedule

Location	June		July		August		September		TOTAL
	Week Day	Week end	Week Day	Week end	Week Day	Week end	Week Day	Week end	
Miners Beach	3	2	7	4	7	4	3	2	32
Sand Point Beach	0	0	7	4	7	4	0	0	22
Commercial Visitors	3	2	7	4	7	4	3	2	32
Total	0	0	0	0	0	0	0	0	0

Table 2. Estimated Number of Visitor Contacts during Sampling Period

Location	June		July		August		September		TOTAL
	Week Day	Week end	Week Day	Week end	Week Day	Week end	Week Day	Week end	
Miners Beach	60	92	120	180	115	175	60	92	894
Sand Point Beach	0	0	61	90	64	95	0	0	310
Commercial Visitors	341	511	638	638	638	638	341	511	4,256
Total	0	0	0	0	0	0	0	0	0

(C) Instrument Administration:

Miners Beach & Sand Point Instrument Administration

An on-site questionnaire will be administered in the same fashion at both Miners and Sand Point beaches. An electronic version of the questionnaire will be self-administered via a handheld tablet and is expected to be completed before the end of the contact. Questions in Section 2 are related to crowding. The questionnaire has four questions that use four separate photos depicting different levels of crowding. The photos will be in a grid to be viewed simultaneously. Each question will have a separate set of photographs.

For respondents uncomfortable with using electronic tablets, the survey administrator will have paper questionnaires that will include a set of laminated photos that will be used to complete the questionnaire related to crowding.

Researchers will stay nearby to answer any questions when necessary. The following script will be used to initiate the contact and to administer the questionnaire:

“Hello, my name is _____ from the University of Minnesota. I am conducting a survey for the National Park Service to learn more about visitor’s experience at Miners Beach/Sand Point. Your participation is voluntary and all responses will be kept anonymous. Would you be willing to take a 15-minute survey?”

→ If **“YES”** – then ask, “Has any member of your group been asked to participate in this survey before?”

If **“YES”** (already asked to participate) then, *“Thank you for your time. Have a great day.”*

If **“NO”** (have not been previously asked to participate) then, *Would you be willing to take a short survey today?*

⇒ If Yes - *“Thank you for agreeing to participate. Who in your group is at least 18 years old and had the most recent birthday?”*

To start the questionnaire, simply start entering your responses with this simple keyboard. To move to the next questions, swipe the screen across. If you have any questions, I’ll be right here. Let me know when you are finished. *. Hand them the tablet and let them know you will be there if they have any questions.*

IF they express concern with using the tablet,

“We have a paper version available for you to use-it’s that easy!” Hand them the questionnaire, pencil, and clipboard. *“When you get to question that requires the photographs, let me know, and I’ll hand you a set of photos needed for the questions in that section.”*

→ If **“NO”** – (soft refusal) - ask them if they would be willing to answer the non-response bias questions (listed below) and then thank them for their time. The responses to the following non-response bias questions will be recorded:

Following questions will be asked:

- ❖ group size,
- ❖ visitation history (number of times visiting the site),
- ❖ perception of number of people on beach as a crowding issue,
- ❖ zip code

→ If **“NO”** – (hard refusal) - *end the contact and thank them for their time. Record group size.*

Commercial Visitor Instrument Administration

Commercial visitors arrive and depart Miners Beach most frequently through a shuttle bus operated by the transportation company Altran. The contact card will be administered by the shuttle drivers during the return trip at the end of the visitation day. The bus drivers will be trained on the process of sampling protocol and administration.

Once visitors are seated, the shuttle driver will ask one member of each group to have the adult over 18 years old with the most recent birthday if they would be willing to complete a survey once they return home. Each person who agrees will be given a contact card that will include a request to provide their name and email address. The contact card will also include the non-response questions that will be used in the non-response analysis for the survey. Each contact card will include a PIRO sticker as a de minimis token of appreciation. If person refuses, the bus driver will record group size for comparison with those who complete the contact card.

Shuttle driver script:

“Hello, my name is _____ from Altran, and I’m helping the University of Minnesota conduct a survey for the National Park Service to understand more about your experience at Miners Beach today. Your participation today is totally voluntary, and all of your information will be kept anonymous.

For those of you agreeing to take the survey when you return home, I’m going to ask the person in your group who is over 18 had the most recent birthday to complete the information on the card. This card asks you answer 4 questions and to provide your email address. The research staff will only use this information to email you a questionnaire that will take no more than 10 minutes to complete. The results of this study will provide park managers with that will help them to manage the area to improve visitor experiences.”

If a group refuses, the bus driver will record group size for comparison with groups who complete the questionnaire.

Once all of the contact cards are collected, we will follow Dillman, Smyth and Christensen (2014) to conduct the on-line survey. The email address will only be used to send all participants the initial post-visit reminder with the URL that will connect them to the survey from the email, and send the two follow-up reminder emails. (All email addressed will be destroyed by shredding at the end of the sampling period. Individual names or any other personally identifiable information will not be requested or necessary for the purposes of this study).

(D) Expected Response Rate / Confidence Level:

A total of 5,460 visitors will be contacted during the sampling periods. The number of refusals will be recorded and will be used to calculate the overall response rate (Tables 3 & 4). We anticipate a margin of error of between +/-4 and 7% plus at a 95 percent level of confidence.

Based on recent beach research by Whittaker and Shelby (2012) and previous PIRO projects (Warzecha, Anderson, James & Thompson, 2001), a conservative on-site agreement rate for Miners Beach and Sand Point is estimated to 65%. Based upon this, 894 on-site contacts are required at Miners Beach to reach the goal of 581 completed responses, and at Sand Point 310 contacts are required to attain 200 completed responses during peak season (Table 3)

Based upon our sampling schedule and data from Altran (the shuttle bus company), there will be approximately 4,250 individuals will be riding the shuttle bus during the sampling period. Assuming a 40% response rate based on the on-site request for emails, we anticipate receiving approximately 1,702 will complete the contact cards (Table 4).

Table 3. Response rates based upon total estimated number of all on-site visitor contacts

Location	Initial Contacts	Expected Response Rate	Total Number of Responses	Total Number of Refusals	Non-response survey 80%	Hard Refusals 20%
Miners Beach	894	65%	581	313	250	63
Sand Point Beach	310	65%	200	110	88	22
TOTAL	0		0	0	338	85

Assuming a 25% response rate from 1,702 who provide emails, we are anticipating 425 completed questionnaires from commercial visitors (Table 4).

Table 4. On-line questionnaire response rates based upon total estimated number visitor contacts

	Shuttle Bus			On-line Questionnaire			
	Initial Contacts	Expected Return Rate (40%)	Total Number of Refusals	Number of Potential respondents	Total Number of Responses (25%)	Non-respondents	Non-response survey
Commercial Visitors	4,256	1,702	2,554	1,702	425	1,277	127

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

We will have responses to questions from the survey that will serve as the non-response bias survey. All beach visitors who refuse to complete the full questionnaire and commercial visitors who do not complete the online questionnaire will be asked the following questions.

- ❖ perception of the number of people on the beach as a crowding issue
- ❖ group size
- ❖ visitation history
- ❖ zip code

For the 2,554 commercial visitors who refuse to complete the on-site contact card, groups sizes will be recorded. We will use group size to determine if any non-response bias exists between the respondents and non-respondents of the contact cards. Results for the on-site contact will be included in the report with any necessary cautions. For the on-line survey, we will send three questions from the survey, via email, to all non-respondents. We expect that 10% of the non-

respondents will answer the questions and return the email. The responses to the non-response survey will be used to determine if any non-response exists.

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

All questions are taken on the NPS 2016 Pool of Known Questions. The questionnaire was reviewed by an NPS Denver Service Center staff. A pre-test among six UMN faculty and graduate students familiar with survey research ensued to assure questions were understandable and reasonable. Feedback was incorporated into the final questionnaires.

BURDEN ESTIMATES:

The total combined burden (Miners Beach, Sand Point Beach and Commercial) for this collection is estimated to be 455 hours. All estimates are rounded to nearest whole number.

Miners Beach

We expect the initial contact time to be about 1 minute per person (894 x 1 minute = 15 hours). We expect 35% (n=313) will refuse to participate during this initial contact. Of these, we estimate 80% will complete the non-response form (n=250). For those, we will record their refusal and ask them to answer a few questions that will be used for a non-response check, estimated at 2 minutes per person (250 x 2 minutes = 8 hours). Participants will spend approximately 15 minutes to complete the questionnaire (581 x 15 minutes = 145 hours: Table 5).

Sand Point Beach

We expect the initial contact time to be about 1 minute per person (310 x 1 minute = 5 hours). We expect 35% (n=110) will refuse to participate during this initial contact. Of these, we estimate 80% will complete the non-response form (n=88). For those who refuse, we will record their refusal and ask them to answer a few questions that will be used for a non-response check, estimated at 2 minutes per person (88 x 2 minutes = 3 hours). Participants will spend approximately 15 minutes to complete the questionnaire (200 x 15 minutes = 50 hours; Table 5).

Table 5. Total Combined Number of Response and Burden Estimate for Miners beach and Sand Point Beach

	Responses	Completion Time (minutes)	Burden Hours
Miners beach and Sand Point Beach			
On-site Initial Contact -	1,204	1	20
On-site Questionnaire	781	15	195
On-site Non response survey	338	2	11
Subtotal	0		0

Commercial Visitors

Contact card: Commercial visitors will be contacted on the bus, 1 adult per party (estimated n= 4256). We expect the initial contact time to be about 1 minute per person (4,256 x 1 minutes = 71 hours). We expect 60% (2,554) will refuse to participate during this initial contact. Of those who agree to participate during this initial contact (40%; 1,702), they will complete a contact card where they provide their e-mails; this survey is estimated to take 3 minutes (1702 x 3 minutes = 85 hours). The total annual burden to complete the on-site shuttle contact with commercial visitors is estimated to be 156 hours (Table 6).

On-line Survey: Those that provide their emails (1,702), we expect 25% (425) will complete the on-line questionnaire. These participants will spend about 10 minutes to complete the questionnaire online (425 x 10 minutes = 71 hours; Table 7). We anticipate 10% (n=127) will take less than one minute to complete the on-line survey (127 x 1 minute = 2 hours).

Table 6. Total Combined Number of Response and Burden Estimate for Commercial Visitors

	Responses	Completion Time (minutes)	Burden Hours
Commercial			
On site Initial Contact	4,256	1	71
On site returned cards	1,702	3	85
On-line questionnaire	425	10	71
Non-response survey	127	1	2
	0		0

	Responses	Completion Time (minutes)	Burden Hours
Total burden requested under this ICR:	8,833		455

REPORTING PLAN:

Project data will be analyzed using descriptive statistics as well as comparative analysis for differences in acceptability levels among groups of interest (types of users, first-time vs. repeat visitors, etc.). A technical report will be provided to PIRO and for inclusion in the Social Science Studies Consortium. A presentation for interested audiences will be developed and shared. Conference presentations and refereed journal publications will be considered.

REFERENCES

Dillman, D.A., Smyth, J.D., Christian, L.M. (2014). Internet, phone, mail and missed-mode surveys: The Tailored Design Method, 4th edition. Hoboken, NJ: Wiley & Sons.

National Park Service. (2017). National Park Service Visitor Use Statistics: Park Reports, Pictured Rocks National Lakeshore. Last accessed February 20, 2017, <https://irma.nps.gov/Stats/Reports/Park/PIRO>

Warzecha, C.A., Anderson, D.H.A., James, E.B., & Thompson, J.L. (2001). Visitor use at Pictured Rocks National Lakeshore: Comparison of backcountry and front-country users. St Paul, MN: University of Minnesota Cooperative Park Studies Program. 106 pg.

Whittaker, D., & Shelby, B. (2012). Boats, beaches, and river banks: Visitor evaluations of recreation on the Merced River in Yosemite Valley. Confluence Consulting. 130 pg.

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.