

NOTE TO REVIEWER:

For the purposes of this review and submission the justifications for each question or section of questions is highlighted in a shaded text box above each question. These text boxes will not be printed on the final version of the surveys. The Topic Areas noted are consistent with the currently approved pool questions for the NPS Programmatic Review Process (1024-0224 - Current Expiration Date: 10-31-2015). The questions that are slight variations are denoted as such. These questions have been carefully discussed and generally approved by the NPS Information Collection Review Coordinator for inclusion in the currently approved questionnaire with understanding that that all questions will require further review and consideration by OMB before full determination and approval can be granted.

This questionnaire will be administered on-site by interviewers using clipboards.

OMB Control Number: 1024-0224

Expiration Date: 10-31-2015

Fluid Consumption of Backcountry Users at Grand Canyon National Park (GRCA)

Dear Grand Canyon National Park Visitor:

We are conducting this survey to learn more about backcountry day hikers at Grand Canyon National Parks to understand more about the plans our visitors use to stay hydrated during their hiking trips. You have been randomly chosen to participate in this survey, so your opinions are important to us. The survey takes about 5 minutes to complete and the information you provide will be anonymous. Please read each question carefully and respond to the best of your ability. Once you are done, please return the survey to one of the surveyors. Thanks you.

PAPERWORK REDUCTION ACT STATEMENT: The National Park Service is authorized by 16 U.S.C. 1a-7 to collect this information. This information will be used by park managers to understand the hydration strategies of hikers in the Grand Canyon. Your response to this request is voluntary and anonymous. No action may be taken against you for refusing to supply the information requested. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

BURDEN ESTIMATE statement: Public reporting burden for this survey is estimated to be 5 minutes per respondent. Please direct comments regarding the burden estimate or any other aspect of this collection to: Christian Malcolm, Preventive Search and Rescue (PSAR) Supervisor; Branch of Emergency Services, at Christian_Malcolm@nps.gov (email), or Grand Canyon National Park, 3 Clinic Rd, Grand Canyon Village, AZ 86023.

TOPIC AREA 1: GEND1

1. What is your gender? (Please mark one)

- Male
- Female
- Do not wish to respond

TOPIC AREA 1: AGE2

2. In what year were you born? 19_____

TOPIC AREA 1: GR1

3. On this visit, what kind of personal group (not guided tour/school group) were you with? (Please mark only one)

- Alone
- Family
- Friends
- Family and Friends
- Other _____

TOPIC AREA 3: TBACK3

4. 4a. Please tell us where (location) and when (time) you started and ended your hike? (for the time, please circle AM or PM)

| Begin | | End (Arrival to Trailhead) | |
|----------|-------------------|----------------------------|-------------------|
| Location | Time (AM / PM) | Location | Time (AM / PM) |

4b. Please tell us where (location) and when (time) you reached your destination? (for the time, please circle AM or PM)

| Destination | |
|-------------|-------------------|
| Location | Time (AM / PM) |

4c. Please tell us whether you reached your planned destination:

- Yes
- No
- No planned destination

TOPIC AREA 2:TPLAN17 (variation)

5. On this trip to the Grand Canyon, please tell us the types and amount fluids you had with you during your hike. (Mark all that apply)

| Types of Fluids | How much did you <i>drink</i> (liters)? | How much did you <i>bring</i> (liters)? |
|--|---|---|
| <input type="checkbox"/> Water | _____ | _____ |
| <input type="checkbox"/> Sports Drink (e.g. Gatorade) | _____ | _____ |
| <input type="checkbox"/> Electrolyte Mix (e.g. Powder) | _____ | _____ |
| <input type="checkbox"/> Other _____ | _____ | _____ |
| <input type="checkbox"/> None | | |

TOPIC AREA 2: TPLAN15 (variation)

6. During your hike in the Grand Canyon, please indicate (on a scale of 1-5) the extent to which the following factors you either agree or disagree with concerning your hydration patterns. (Circle the number of your choice for each statement)

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|-------------------|----------|---------|-------|----------------|
| I wanted to stay well hydrated and always drank the maximum amount of fluids I could tolerate at a time | 1 | 2 | 3 | 4 | 5 |
| I took small sips of fluid now and then in order to prevent that “cotton-mouth” feeling | 1 | 2 | 3 | 4 | 5 |
| I only drank water whenever I was thirsty and only amounts in order to quench my thirst | 1 | 2 | 3 | 4 | 5 |
| I adjusted my fluid intake based on urine output and appropriate color of urine during the hike | 1 | 2 | 3 | 4 | 5 |
| I only consumed fluids with a meal or a snack | 1 | 2 | 3 | 4 | 5 |
| I think I did not drink enough during my hike, but I plan on rehydrating as soon as I can relax and have a meal | 1 | 2 | 3 | 4 | 5 |
| Whenever there was water available on the trail, I drank as much as I could | 1 | 2 | 3 | 4 | 5 |
| I think I drank too much fluids during my hike | 1 | 2 | 3 | 4 | 5 |
| I relied upon water sources along the trail for support during my hike | 1 | 2 | 3 | 4 | 5 |
| I drank water at predetermined time intervals | 1 | 2 | 3 | 4 | 5 |

TOPIC AREA 2: TPLAN18 (variation)

7. Please tell us how you planned to stay hydrated during your hiking trip. Which of the following items did you use during your hike today? (Mark all that apply)

- Bottle
- Bladder Hydration System (e.g. Camelback)
- Other _____
- None of the above

TOPIC AREA 3: TRIPC41 (variation)

8. How prepared for this hike did you consider yourself to be?

| Under prepared | Somewhat under prepared | Adequately prepared | Somewhat over prepared | Over prepared |
|-----------------------|--------------------------------|----------------------------|-------------------------------|----------------------|
| 1 | 2 | 3 | 4 | 5 |

TOPIC AREA 3: TRIPC9 (variation)

9. How difficult was your hike?

| Much easier than expected | Somewhat easier than expected | About what you expected | Somewhat harder than expected | Much harder than expected |
|----------------------------------|--------------------------------------|--------------------------------|--------------------------------------|----------------------------------|
| 1 | 2 | 3 | 4 | 5 |

TOPIC AREA 2: TPLAN1

10. Prior to your hike, how did you and your personal group determine how much fluid to bring?
(Mark all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Did not think about it | <input type="checkbox"/> Considered distance |
| <input type="checkbox"/> Asked a professional | <input type="checkbox"/> Considered hike duration |
| <input type="checkbox"/> Asked an experienced friend | <input type="checkbox"/> Considered temperatures |
| <input type="checkbox"/> Consulted a magazine | <input type="checkbox"/> Knew water was available on the trail |
| <input type="checkbox"/> Consulted a guidebook | <input type="checkbox"/> Brought all that I could |
| <input type="checkbox"/> Consulted a blog/website | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Considered time of day | |

TOPIC AREA 2: TPLAN1

11. Prior to your hike, how did you and your personal group obtain information about hiking hazards in Grand Canyon National Park? (Mark all that apply)

- | | |
|---|--|
| <input type="checkbox"/> Obtained no information prior to visit | <input type="checkbox"/> Local Hotel |
| <input type="checkbox"/> Park Ranger/Employee | <input type="checkbox"/> Friend/Family |
| <input type="checkbox"/> Grand Canyon Visitor Center | <input type="checkbox"/> Book/Magazine |
| <input type="checkbox"/> Backcountry Information Center | <input type="checkbox"/> Blog/Website |
| <input type="checkbox"/> Trailhead Signs | <input type="checkbox"/> Social Media Website (other internet) |
| <input type="checkbox"/> Grand Canyon National Park Website | <input type="checkbox"/> Other Source _____ |
| <input type="checkbox"/> Live in Local Area | |