



Visitor Survey of Day-use Visitors at Devils Punch Bowl State Natural Area

Final Report

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Nature
HISTORY
Discovery

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EXECUTIVE SUMMARY

Objectives

Understanding opinions of park users about issues such as the quality of facilities, social and resource conditions, and how they use these parks is critical to providing adequate programs and services. Project objectives were to describe day user activities, demographic characteristics, and opinions about conditions and management at this park and provide recommendations for maintaining or improving conditions at this park.

Methods

Data were obtained from questionnaires administered to random samples of day user visitors to the park between July 2 and August 14, 2011. The day-use visitor survey involved on-site intercepts. The total number of completed questionnaires was $n = 405$ with a response rate of 79%. The sample size allows generalizations about the population of day users at Devils Punch Bowl State Natural Area at a margin of error of $\pm 4.9\%$ at the 95% confidence level.

Results

Personal and Visit Characteristics

- The most popular day-use activities at this park were hiking or walking (65%), sightseeing (49%), beachcombing (40%), exploring tidepools (38%), and surfing / boogie boarding (38%). The least popular activities were attending ranger-led programs (1%), fishing (3%), bicycling on local roads (4%), and kite flying (7%).
- The most common main activity groups were people surfing / boogie boarding (33%), hiking or walking (24%), sightseeing (14%), and exploring tidepools (10%). The least common activity groups were people kite flying (1%), bird or wildlife watching (1%), picnicking or barbequing (3%), dog walking (3%), and beachcombing (3%).
- Day users spent an average of approximately three hours in the park. The majority (55%) of day users spent one to two hours in the park, with only 28% spending four or more hours in the park.
- On average, day users traveled 349 miles from home to visit the park.
- Most day-use visitors to the park (83%) are non-local visitors (living 31 miles or more from the park).
- In total, 70% of day-use respondents had visited this park before. Day use visitors had visited an average of 17 times in the past 12 months with the highest proportions having made no trips (19%) and one trip (17%) to this park in the past year, while 43% had made two to 12 trips.
- Average group size of day-use visitors was approximately four people ($M=3.64$ people). The majority of day users (51%) visited in groups of one to two people.
- In total, 75% of day users did not bring dogs with them; 25% brought dogs.
- Almost all day users arrived at the park in their family vehicle (77%), 10% came in someone else's vehicle, and 13% in another form of transportation. On average, there were 2.81 people in each family vehicle and 3.85 people in someone else's vehicle. When combining personal and somebody else's vehicle responses, the average number of people per vehicle was 2.96.
- The majority (53%) of day users considered this park the main reason for their trip.
- If unable to go to the park for this trip, they would have either gone somewhere else for the same activity (62%) or come back another time (16%).

Visitor Spending

- Most day users to the park (89%) are non-local visitors (living 31 or more miles from the park).
- Non-local day-use visitor party spending was higher than local day users, with the highest percentage (29%) of non-local day-use visitors reporting spending \$151-\$350 on their trip.
- Most day-users reported spending some money on gasoline and oil and groceries. Most non-local day use visitors also reported spending money on restaurants and bars.

Obtaining Information about the Parks

- Almost all day users (92%) were able to find the information they needed when planning their visit to this park, and the few (8%) who did not find it would like additional road signage, directions to the tidepool area trailhead, and park maps.
- The most heavily used sources of information by day users were previous visits (71% used sometimes or often), friends or family members (70%), highway signs (63%), official internet websites (e.g., Oregon State Parks, Travel Oregon; 57%), and brochures (40%). The least used sources were health care providers (10%), community organizations (14%), videos or DVDs (18%), radio (19%), and work (19%).
- Official internet websites were used by respondents (46%) as their first primary information source, followed by friends or family (25%), previous visits (9%), highway signs (5%), and brochures (5%).

Satisfaction with Experiences and Conditions

- Day users considered the most important characteristics the park's absence of litter (94%), park cleanliness (e.g., lawn care, lack of graffiti; 92%), cleanliness of toilets (91%), parking for vehicles (80%), and the number of toilets (79%). The least important attributes were the amount of educational information (36%), facilities for groups to gather (41%), the presence of park rangers / personnel (43%), the quality of educational information (44%), and ease of movement / access (wheelchair, elderly, stroller; 47%).
- Overall satisfaction among day users was extremely high, as 94% were satisfied and almost no respondents (6%) were dissatisfied or neutral. In addition, the highest proportion of users was "very satisfied" (55%). The majority of day users were satisfied with most characteristics at Devils Punch Bowl State Natural Area. Day users were most satisfied with park cleanliness (91%), absence of litter (84%), number of toilets / bathrooms (83%), and personal safety (80%). Users were least satisfied with the amount and quality of educational information (47% to 48%), ease of movement / access (58%), and information provided about conditions / hazards (59%). Most day users (91%) said they were likely to return to this park in the future.
- An Importance – Performance analysis showed that all park attributes were in the "keep up the good work" category, indicating that users thought that staff were doing a good job managing conditions and experiences. There were, however, two attributes that was important to users, but these users were only slightly satisfied with the attribute. Managers should consider monitoring the cleanliness of toilets and parking for vehicles at the park.
- Crowding among day users was in the high normal range where visitation is probably not greater than carrying capacity, and most of these users were not encountering more

people than they would tolerate. In the future, crowding should be studied if increased use is expected, allowing management to anticipate problems.

Attitudes about Management Strategies

- Day users most strongly supported management strategies that would provide more recycling containers (77%), opportunities for viewing wildlife (69%), trash cans (68%), more information / education (nature, history; 63%), and opportunities for hiking (61%). The least supported strategies were to close the park to all recreation/tourism activities (11%), limit the number of people allowed in the park per day (18%), provide wireless internet access within the park (22%), and provide downloadable mobile phone applications (23%).

Sociodemographic Characteristics of Users

- There were a few more males (52%) than females (48%) day users at this park.
- The average age of respondents was 44 years old, and the largest proportions of users were 30 to 39 years old (22%) and 50 to 59 years old (22%).
- The average annual household income before taxes of respondents was \$65,600, and the largest proportion of users had incomes from \$50,000 to \$69,999 (24%). Day-use visitors to Devils Punch Bowl State Natural Area are generally wealthier than the Oregon population at large (Oregon median household income in 2010 was \$51,994).
- Almost all respondents were white (i.e., Caucasian; 95%) with few Asians (2%), Blacks / African Americans (1%), American Indian or Alaska natives (1%), Hispanic / Latinos (<1%), and Native Hawaiian or Pacific Islanders (<1%).
- Almost all day users (99%) considered English as the primary language in their homes.
- Over 68% of day use visitors lived in Oregon, 9% resided in Washington State, 2% were from California, and 2% were from Idaho. Among day users, 28% lived in the Willamette Valley region (<http://www.guidetooregon.com/regions/map.html>), 18% resided in the Portland Metro region, 18% resided in the Coastal region, 2% resided in the Central region, 1% resided in the Mt. Hood / Gorge region, and 1% lived in the Southern region of Oregon. No visitors lived in the Eastern region of the state.
- 82% of day users said that nobody in their group had a disability, whereas 18% had at least one group member with a disability. The most common disability was associated with walking (12% of day users), while 5% of day users had a hearing disability, 2% had a sight disability, 1% had a learning disability, and 3% had some other form of disability.

Recommendations

Management Recommendations

- Most day users traveled to this park in their own vehicles (77%), so adequate parking is important and should be considered in planning and management.
- The average number of visitors per vehicle for Devils Punch Bowl State Natural Area day-use vehicles (2.96) was significantly lower than the current FMS assumption of 4.0 visitors per vehicle. Park managers may want to use this updated figure in future day-use calculations for the park.
- Almost all day users (94%) were satisfied with their experiences and the conditions at this park. Satisfaction, however, was consistently lower for the amount and quality of educational information (47% to 48%) and information provided about conditions /

hazards (59%). Managers may wish to evaluate these services to users to insure they are meeting visitor needs.

- Users were also somewhat less satisfied with the ease of movement and access around the park (e.g., wheelchair, stroller, elderly; 58%). Given that over 18% of day-use visitors were over the age of 60 and 18% of day users had disabilities (12% with disabilities related to walking), managers may want to consider evaluating access throughout the park and perhaps even obtaining a current ADA or related audit.
- The results suggest that crowding at day-use areas is “high normal” where these areas have probably not exceeded social carrying capacity yet, but may be trending in that direction and use should be studied to see if increased use is expected, allowing management to anticipate problems. Monitoring and management of park use levels is needed, especially given that 55% of park users supported the provision of more opportunities for escaping crowds.
- The Importance – Performance analysis shows that all park attributes were in the “keep up the good work” category, indicating that users thought that staff were doing a good job managing conditions and experiences. However, this analysis showed that managers should consider examining the cleanliness of toilets and parking for vehicles at the park.
- Day user visitors most strongly supported strategies that would provide more recycling containers (77%), opportunities for viewing wildlife (69%), trash cans (68%), information / education (63%), and opportunities for hiking (61%). Managers may want to consider some or all of these strategies.
- Almost all park visitors (92%) were able to find the information they needed when planning their visit to Devils Punch Bowl State Natural Area. However, some visitors (8%) were not able to find all information needed. The most popular information needed was additional road signage, directions to the tidepool area trailhead, and park maps.
- A large proportion of day users (46%) depended on official internet websites as the primary source of obtaining information about state parks such as Devils Punch Bowl State Natural Area. Given these results, it is imperative for staff to ensure that agency and park internet websites are easy to navigate, up to date, and provide comprehensive information.
- Appendix A is a listing of 224 verbatim open ended positive comments (43 comments, 1 page) and negative comments and suggestions for improvement of Devils Punch Bowl State Natural Area (181 comments, 5 pages). Many comments may provide insights for future planning and management. The most common concerns expressed needs for: (a) year-round warm water showers for surfers; (b) improving the trail to the tidepool area; (c) improved restrooms (i.e., soap dispensers, mirrors, etc.); (d) additional / improved signage both to and within park; (e) additional recycling / trash receptacles; f) additional parking (especially for large RVs); and making the park more ADA accessible.

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INTRODUCTION AND OBJECTIVES

The Oregon State Parks system provides public access to a collection of the state's outstanding natural, cultural, scenic, and outdoor recreation resources. Understanding the opinions of park users regarding issues such as the quality of facilities, recreational opportunities, social and resource conditions, and how they use these parks is critical to providing effective facilities, programs, and services. Project objectives were to describe day user activities, demographic characteristics, and opinions about conditions and management at this park and provide recommendations for maintaining or improving conditions at this park.

METHODS

Data were obtained from a questionnaire (see Appendix B) administered to a randomly selected sample of day users at Devils Punch Bowl State Natural Area between July and August 2011. An on-site (face to face) survey method was used for day users. A respondent was only allowed one opportunity to complete a questionnaire.

Onsite Survey of Day Users

Day users 18 years of age and older who visited Devils Punch Bowl State Natural Area between July 2 and August 14, 2011 were approached in person (face to face) and asked to complete the six page questionnaire onsite at this park. Day users were asked if they would be willing to complete the questionnaire and asked to immediately complete and return the full length questionnaire onsite. Questionnaires were printed on both sides of two legal sized (8 ½ x 14) pages and folded into a small booklet, and took most respondents approximately 15 to 20 minutes to complete. Respondents were provided with a clipboard and pen to complete the questionnaire. A number of volunteers (e.g., Camp Hosts) administered these questionnaires to reduce costs.

Sample Size and Response Rate

As shown in Table 1, the total number of completed questionnaires was $n = 405$ with an estimated total response rate of 79%.

Table 1. Sample size and response rate

	Initial contacts	Completed surveys (n)	Response rate (%)
Day Users	510	405	79

The sample size allows generalizations about the population of day users at Devils Punch Bowl State Natural Area at a margin of error of $\pm 4.9\%$ at the 95% confidence level, which is better than the conventional standard of $\pm 5\%$ that has been widely accepted and adopted in recreation and tourism research (Mitra & Lankford, 1995; Vaske, 2008).

Questionnaires administered to day users included questions on a range of topics such as prior visitation, activity participation, satisfaction, support of management, and demographic characteristics. To highlight key findings, data were often recoded into major response categories (e.g., agree, disagree; support, oppose), but basic descriptive findings of uncollapsed questions (i.e., strongly, slightly agree) are provided in Appendix C.

RESULTS

Personal and Visit Characteristics

Activity Groups. The questionnaire asked respondents to check all of the activities in which they participated at Devils Punch Bowl State Natural Area on their most recent trip. Table 2 shows that the most popular activities at this park were hiking or walking (65%), sightseeing (49%), beachcombing (40%), exploring tidepools (38%), and surfing / boogie boarding (38%). The least popular activities were attending ranger-led programs (1%), fishing (3%), bicycling on local roads (4%), and kite flying (7%).

Respondents were then asked to specify the one primary activity in which they participated most often during their recent visit to Devils Punch Bowl State Natural Area. Table 3 shows that the most common primary activity groups were people surfing / boogie boarding (33%), hiking or walking (24%), sightseeing (14%), and exploring tidepools (10%). The least common activity groups were people kite flying (1%), bird or wildlife watching (1%), picnicking or barbequing (3%), dog walking (3%), and beachcombing (3%).

Table 2. Day-use recreation activities at the park

Activity	% Participating ^a
Hiking or walking	65
Sightseeing	49
Beachcombing	40
Exploring tidepools	38
Surfing/boogie boarding	38
Bird or wildlife watching	27
Swimming/wading	25
Dog walking	21
Picnicking or barbequing	18
Running or jogging	10
Other ^b	9
Kite flying	7
Bicycling on local roads	4
Fishing	3
Ranger-led programs	1

^a Cell entries are percentages (%) of users who reported participating in the activity at the park on their most recent visit. Percentages do not sum to 100% because respondents could check more than one activity from the list.

^b The most popular “other” activities were: photography, whale watching, Mo’s, wine, and eating.

Table 3. Primary day-use activities at the park

Activity	Day Users (%)
Surfing/boogie boarding	33
Hiking or walking	24
Sightseeing	14
Exploring tidepools	10
Other ^a	5
Swimming/wading	4
Beachcombing	3
Dog walking	3
Picnicking or barbequing	3
Bird or wildlife watching	1
Kite flying	1

^a The most popular “other” activities were: photography, whale watching, Mo’s, wine, and eating.

Duration of Visit. Day users were asked to report how many *hours* they spent at Devils Punch Bowl State Natural Area on their recent trip. Table 4 shows that, on average, day users spent approximately three hours in the park (M=2.88 hours). The majority (55%) of day users spent one to two hours in the park, with only 28% spending four or more hours in the park.

Table 4. Duration of day user visit at the park

1 hour	28
2 hours	27
3 hours	18
4 to 5 hours	19
6 to 9 hours	7
10 or more hours	2
Mean / average hours	2.88

Cell entries are percentages (%) unless specified as means / averages

Distance Traveled. Respondents were also asked to report about how far from home they traveled to get to the park. Table 5 shows that 17% of day-use visitors were local (driving 30 miles or less to reach the park), 17% originated 31 to 60 miles from the park, and 66% originated from 61 miles. Day users, on average, traveled approximately 349 miles to visit the park.

Table 5. Day user distance traveled to the park

30 miles or less	17
31 to 60 miles	17
61 or more miles	66
Mean / average	349.26

Cell entries are percentages (%) unless specified as means / averages

Previous Visitation. Users were asked if they had ever visited Devils Punch Bowl State Natural Area before their most recent trip. Table 6 shows that 70% of day-use respondents had visited this park before, whereas 30% had not visited previously.

Table 6. Day user previous visitation to the park

	Day Users (%)
Yes, visited park before	70
No, not visited park before	30

Users who had previously visited this park were then asked how many trips they had made to this park in the past 12 months. Table 7 shows that day users had visited an average of 17 times in the past 12 months with the highest proportions having made no trips (19%) and one trip (17%) to this park in the past year, while 43% had made two to 12 trips.

Table 7. Day user number of previous visits to park in the last 12 months

0 Trips	19
1 Trip	17
2 Trips	14
3 to 5 Trips	16
6 to 12 Trips	13
13 to 24 Trips	7
More than 24 Trips	14
Mean / average trips	16.55

Cell entries are percentages (%) unless specified as means / averages

Group Size. Respondents were asked to report how many people, including themselves, accompanied them at Devils Punch Bowl State Natural Area on their most recent trip. Table 8 shows that the average day user group size was approximately four people ($M = 3.64$ people). Groups most commonly consisted of two people (32%), and three to four people (26%).

Table 8. Day user group size at the park

1 Person (alone)	19
2 People	32
3 or 4 People	26
5 to 10 People	20
11 to 25 People	3
More than 25 People	0
Mean / average	3.64

Cell entries are percentages (%) unless specified as means / averages

Bringing Dogs to the Park. The questionnaires asked day users if they or anyone else in their group brought dog(s) with them to Devils Punch Bowl State Natural Area. Table 9 shows that 75% of day users did not bring dogs with them and 25% brought dogs.

Table 9. Day users bringing dogs with them to the park

	Day Users (%)
No, did not bring dog(s)	75
Yes, brought dog(s)	25

Transportation to the Park. Respondents were asked how they got to Devils Punch Bowl State Natural Area on their most recent trip. Table 10 shows that almost all day users arrived at the park in their family’s personal vehicle (77%), 10% arrived in somebody else’s vehicle, and 13% arrived in another form of transportation. On average, there were three people in each personal family vehicle and four people in somebody else’s vehicle. When combining personal and somebody else’s vehicle responses, the average number of people per vehicle was 2.96.

Table 10. Day users transportation to the park

	Day Users (%)
My family’s personal vehicle ^a	77
Other	13
Somebody else’s personal vehicle ^b	10

^a Number of people in vehicle: mean / average = 2.81 (1-3 people = 69%).

^b Number of people in vehicle: mean / average = 3.85 (1-4 people = 60%).

Reasons for Visiting. Day users were asked if this park was the main reason for their trip. Table 11 shows that 53% of day users considered this park their main reason for the trip.

Table 11. Whether the park was day users main destination

	Day Users (%)
Primarily for recreation – this park was main destination	53
Primarily for recreation – main destination was not this park	35
Primarily for business, family, or other reasons – park was side trip	9
Some other reason	4

Alternatives to Visit. Respondents were then asked what things they would have considered doing if they were not able to go to Devils Punchbowl State Natural Area for this visit. As shown in Table 12, most day users responded that, if unable to go to the park for this visit, they would have either gone somewhere else for the same activity (62%) or come back another time (16%).

Table 12. Day user alternatives to park visit

	Day Users (%)
Gone somewhere else for same activity ^a	62
Gone somewhere else for a different activity ^b	5
Come back another time	16
Stayed home	6
Gone to work at my regular job	1
Something else (none of these)	11

^a If gone somewhere else for same activity, how far from home is the place you would have gone instead: mean / average = 101.78 miles.

^b If gone somewhere else for different activity, how far from home is the place you would have gone instead: mean / average = 116.67 miles.

Section Summary. Taken together, results in this section showed that:

- The most popular day-use activities at this park were hiking or walking (65%), sightseeing (49%), beachcombing (40%), exploring tidepools (38%), and surfing / boogie boarding (38%). The least popular activities were attending ranger-led programs (1%), fishing (3%), bicycling on local roads (4%), and kite flying (7%).
- The most common main activity groups were people surfing / boogie boarding (33%), hiking or walking (24%), sightseeing (14%), and exploring tidepools (10%). The least common activity groups were people kite flying (1%), bird or wildlife watching (1%), picnicking or barbecuing (3%), dog walking (3%), and beachcombing (3%).
- Day users spent an average of approximately three hours in the park. The majority (55%) of day users spent one to two hours in the park, with only 28% spending four or more hours in the park.
- On average, day users traveled 349 miles from home to visit the park.
- Most day-use visitors to the park (83%) are non-local visitors (living 31 miles or more from the park).
- In total, 70% of day-use respondents had visited this park before. Day use visitors had visited an average of 17 times in the past 12 months with the highest proportions having made no trips (19%) and one trip (17%) to this park in the past year, while 43% had made two to 12 trips.

- Average group size of day-use visitors was approximately four people (M=3.64 people). The majority of day users (51%) visited in groups of one to two people.
- In total, 75% of day users did not bring dogs with them; 25% brought dogs.
- Almost all day users arrived at the park in their family vehicle (77%), 10% came in someone else’s vehicle, and 13% in another form of transportation. On average, there were 2.81 people in each family vehicle and 3.85 people in someone else’s vehicle. When combining personal and somebody else’s vehicle responses, the average number of people per vehicle was 2.96.
- The majority (53%) of day users considered this park the main reason for their trip.
- If unable to go to the park for this trip, they would have either gone somewhere else for the same activity (62%) or come back another time (16%).

Visitor Spending

Day users were asked to estimate how much they and the other members of their party spent on their trip within 30 miles of Devils Punchbowl State Natural Area on eight spending categories. The information included in this section of the report summarizes basic visitor spending results from the survey. A more extensive visitor spending analysis will be conducted by Oregon State University and available in a separate report.

For this analysis, “local” visitors are defined as those visitors reporting traveling 30 miles or less from home to get to the park. “Non-local” visitors are those respondents living 31 or more miles from the park. All foreign visitors were classified as “non-local” visitors. Spending reports of \$1,000 or more were considered as outliers and omitted from the analysis.

Table 13 includes the percentages of all park day users that are local and non-local visitors. Most day users to the park are non-local (living 31 or more miles from the park) visitors (89%).

Table 13. Day users, local / non-local

	Day Users (%)
Non-Local	89
Local	11

Table 14 shows the proportion of total spending for local and non-local day-use visitors and reported on a party trip basis. For local day-use visitors, the highest percentage (33%) reported spending \$51-\$150. For non-local day-use visitors, the highest percentage (29%) also reported spending \$151-\$350 on their trip.

Table 14. Day user total spending, dollars per party per trip

	Local	Non-Local
Spent no money	11	5
\$1 - \$25	28	5
\$26 - \$50	6	14
\$51 - \$150	33	26
\$151 - \$350	0	29
\$351 - \$550	6	9
\$551 - \$800	6	10
\$801 - \$1,000	11	3

Table 15 includes the proportion of day-use visitor parties that reported spending any dollars on the eight spending categories (e.g., motel, camping, restaurants and bars, groceries, etc.). For local day-use visitors, most reported spending some money on gasoline and oil (70%) and groceries (55%). In addition to gasoline and oil (72%) and groceries (56%), a large proportion of non-local day use visitors also reported spending money on restaurants and bars (78%).

Table 15. Percent of day user party spending of any dollars in eight spending categories

Spending Categories	Local	Non-Local
Motel, lodge, cabin, B&B, other lodging	16	41
Camping	10	24
Restaurants and bars	45	78
Groceries	55	56
Gasoline and oil	70	72
Park entry, parking, or recreation use fees	0	19
Recreation and equipment (guide fees, equipment rental)	5	16
Souvenirs, clothing, and other miscellaneous	10	40

Section Summary. Taken together, results in this section showed that:

- Most day users to the park (89%) are non-local visitors (living 31 or more miles from the park).
- Non-local day-use visitor party spending was higher than local day users, with the highest percentage (29%) of non-local day-use visitors reporting spending \$151-\$350 on their trip.
- Most day-users reported spending some money on gasoline and oil and groceries. Most non-local day use visitors also reported spending money on restaurants and bars.

Obtaining Information about the Parks

The questionnaire contained several questions examining how day users obtained information about state parks such as Devils Punch Bowl State Natural Area and whether they were able to obtain the information they needed. Table 16 shows that almost all day users (92%) were able to find the information they needed when planning their visit to this state park, and the few (8%) who did not find the information they needed would like additional road signage, directions to the tidepool area trailhead, and park maps.

Table 16. Whether day users found the information needed

	Day Users (%)
Yes, found the information needed	92
No, did not find the information needed ^a	8

^a The most popular information needed was: additional road signage, directions to the tidepool area trailhead, and park maps.

Table 17. Day user use of information sources ^a

	Day Users (%)
Previous visit	71
Friends / family	70
Highway signs	63
Official internet websites (OPRD)	57
Brochures	40
Other ^b	39
Magazines	34
Books	33
Social media websites	29
Newspapers	26
Television	22
Work	19
Radio	19
Videos / DVDs	18
Community organizations (Church, etc.)	14
Health care providers	10

^a Cell entries are percentages (%) of users who used the information source “sometimes” to “often.”

^b The most popular “other” reasons were: word of mouth and Oregon tourism books.

Respondents were also presented with a list of 16 possible sources for finding information and asked how often they obtained information from these sources when thinking about visiting an Oregon State Park such as Devils Punch Bowl State Natural Area. Table 17 shows that the most heavily used sources of information by day users were previous visits (71% used sometimes or often), friends or family members (70%), highway signs (63%), official internet websites (e.g., Oregon State Parks, Travel Oregon; 57%), and brochures (40%). The least used sources were health care providers (10%), community organizations (14%), videos or DVDs (18%), radio (19%), and work (19%).

Respondents were then asked to specify from this list of information sources what one source they would use first when obtaining information about an Oregon State Park such as Devils Punch Bowl State Natural Area. Table 18 shows that official internet websites (e.g., Oregon State Parks, Travel Oregon) were used by almost half (46%) of respondents as the first primary information source, followed by friends or family (25%), previous visits (9%), highway signs (5%), and brochures (5%). Few people used other sources when obtaining information.

Table 18. Day user primary information sources

	Day Users (%)
Official internet websites (OPRD)	46
Friends / family	25
Previous visit	9
Highway signs	5
Brochures	5
Other ^b	3
Social media websites	3
Books	2
Newspapers	1
Work	1

Section Summary. Taken together, results in this section showed that:

- Almost all day users (92%) were able to find the information they needed when planning their visit to this park, and the few (8%) who did not find it would like additional road signage, directions to the tidepool area trailhead, and park maps.
- The most heavily used sources of information by day users were previous visits (71% used sometimes or often), friends or family members (70%), highway signs (63%), official internet websites (e.g., Oregon State Parks, Travel Oregon; 57%), and brochures (40%). The least used sources were health care providers (10%), community organizations (14%), videos or DVDs (18%), radio (19%), and work (19%).
- Official internet websites were used by respondents (46%) as their first primary information source, followed by friends or family (25%), previous visits (9%), highway signs (5%), and brochures (5%).

Satisfaction with Experiences and Conditions

Overall Satisfaction. Respondents were asked “overall, how dissatisfied or satisfied were you with your *overall experience* at Devils Punch Bowl State Natural Area?” Table 19 shows that overall satisfaction was extremely high, as 93% were satisfied and almost no respondents (7%) were dissatisfied or neutral. In addition, the highest proportion of users was “very satisfied” (55%).

Table 19. Day user overall satisfaction

	Day Users (%)
Very Satisfied	55
Satisfied	38
Dissatisfied or Neutral	7

Satisfaction and Expectations with Specific Characteristics. Although almost all day users were satisfied with their overall visit at Devils Punch Bowl State Natural Area, this does not indicate that they were satisfied with every aspect of this park. This project, therefore, first measured respondent *expectations* by asking them the extent they believed that several attributes of Devils Punch Bowl State Natural Area were *important* to their visit (e.g., absence of litter, personal safety, signs, parking). Then, respondents reported their *satisfaction* of these same attributes at this park to measure *performance* of these attributes.

Table 20. Day user specific *expectations* at the park

	Day Users (%) ^a
Absence of litter	94
Cleanliness of park (graffiti, lawns)	92
Cleanliness of toilets / bathrooms	91
Parking for vehicles	80
Number of toilets / bathrooms	79
Courteousness of rangers / personnel	72
Condition / maintenance of trails	70
Personal safety	70
Information about conditions / hazards	68
Signs with directions <i>to</i> the park	67
Signs with directions <i>in</i> the park	65
Number of park trails	59
Variety of things to do	53
Ease of movement / access (wheelchair, elderly, stroller)	47
Quality of educational information	44
Presence of park rangers / personnel	43
Facilities for groups to gather	41
Amount of educational information	36

^a Cell entries are percentages (%) of users who rated the characteristic as “somewhat” or “extremely important.”

Table 20 shows that the most important characteristics were the park’s absence of litter (94%), park cleanliness (e.g., lawn care, lack of graffiti; 92%), cleanliness of toilets (91%), parking for vehicles (80%), and the number of toilets (79%). The least important attributes were the amount

of educational information (36%), facilities for groups to gather (41%), presence of park rangers / personnel (43%), quality of educational information (44%), and ease of movement / access (47%).

Table 21. Day user specific *satisfactions* at the park

	Day Users (%) ^a
Cleanliness of park (graffiti, lawns)	91
Absence of litter	84
Number of toilets / bathrooms	83
Personal safety	80
Cleanliness of toilets / bathrooms	75
Variety of things to do	74
Courteousness of rangers / personnel	73
Parking for vehicles	72
Condition / maintenance of trails	69
Signs with directions <i>to</i> the park	66
Number of park trails	65
Signs with directions <i>in</i> the park	61
Presence of park rangers / personnel	61
Facilities for groups to gather	61
Information about conditions / hazards	59
Ease of movement / access (wheelchair, elderly, stroller)	58
Quality of educational information	48
Amount of educational information	47

^a Cell entries are percentages (%) of users who rated the characteristic as “satisfied” or “very satisfied.”

Table 21 shows that the majority of day users were satisfied with most of these characteristics at Devils Punch Bowl State Natural Area. Day users were most satisfied with park cleanliness (91%), absence of litter (84%), number of toilets / bathrooms (83%), personal safety (80%), and the cleanliness of toilets / bathrooms (75%). Users were least satisfied with the amount and quality of educational information (47% to 48%), ease of movement / access (58%), and information available about conditions / hazards (59%).

Importance – Performance Analysis. One approach for visualizing relationships between expectations (i.e., importance of attributes) and satisfaction (i.e., performance of these attributes) is Importance – Performance (I-P) analysis (Figure 1). Importance or expectations are represented as averages (i.e., means) on the vertical axis (i.e., y-axis) and average performance or experiences (i.e., satisfaction) are measured on the horizontal axis (i.e., x-axis). When combined, these axes intersect and produce a matrix of four quadrants that can be interpreted as “concentrate here” (high importance or expectation, low satisfaction or poor experiences; Quadrant A), “keep up the good work” (high importance or expectation and high satisfaction or good experiences; Quadrant B), “low priority” (low importance or expectation and low satisfaction or poor experiences; Quadrant C), and “possible overkill” (low importance or expectation, high satisfaction or good experiences; Quadrant D). This matrix provides managers with an easily understandable picture of the status of services, facilities, and conditions as perceived by users, and reveals conditions that may or may not need attention (Bruyere, Rodriguez, & Vaske, 2002; Vaske, Beaman, Stanley, & Grenier, 1996).

Figure 1. Importance-performance (I-P) analysis matrix

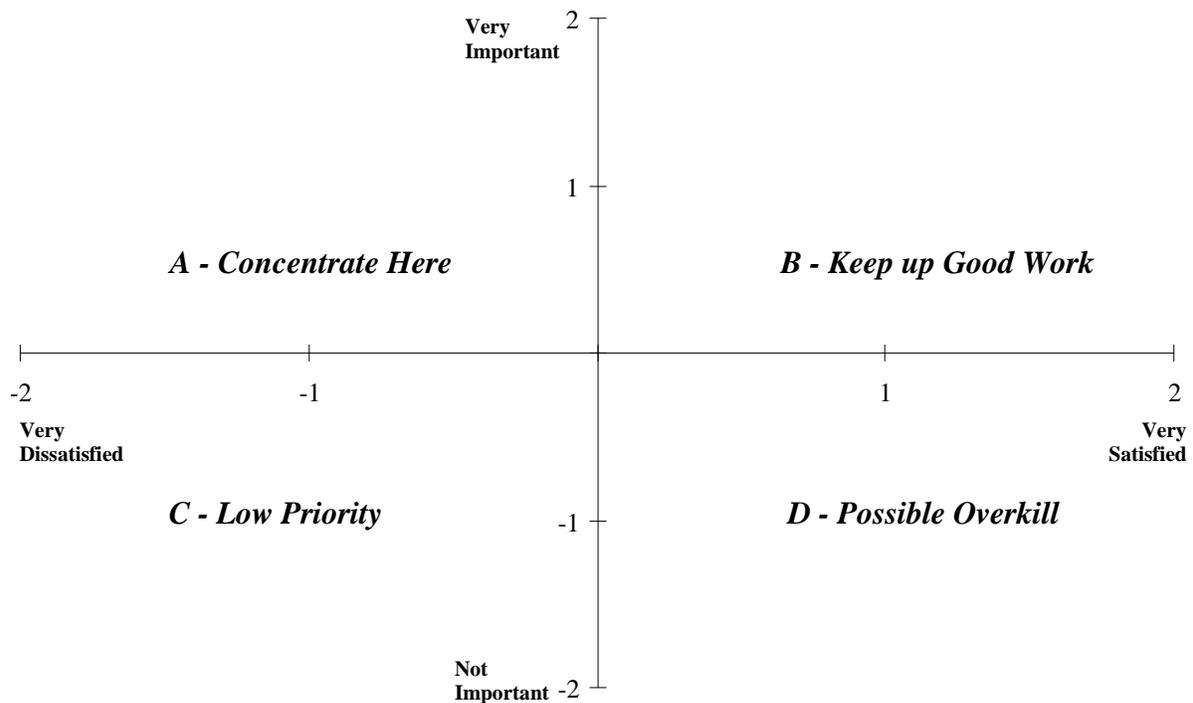


Figure 2. Importance-performance (I-P) analysis matrix for *day users*

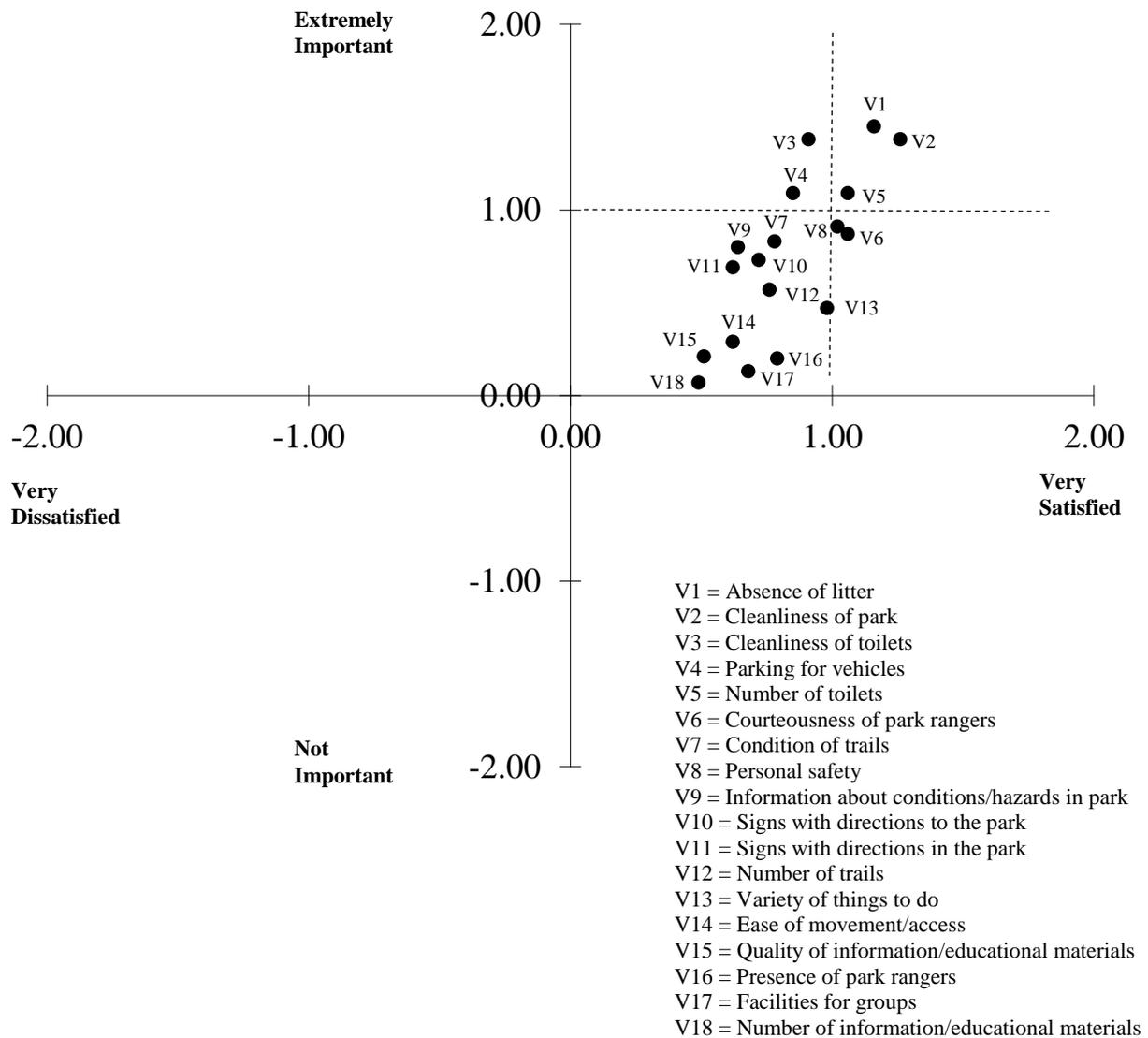


Figure 2 is the I-P matrix for day users at Devils Punch Bowl State Natural Area. The matrix shows that all of the attributes were in the “keep up the good work” quadrant, indicating that day users thought that park staff were doing a good job managing conditions and experiences at the park. It may be important, however, to more carefully examine this quadrant (i.e., dashed lines), as there are two attributes that was important to users, but these users were only slightly satisfied with this attribute. Managers should, therefore, consider monitoring the cleanliness of toilets and parking for vehicles at the park.

Respondents were asked several additional questions about their satisfaction with Devils Punch Bowl State Natural Area, including this park's natural environment and facilities and services. Day users were also asked how likely they would return to this state park. Table 22 shows high day user satisfaction with the park's environment (95%) and somewhat high satisfaction with facilities and services (84%). In total, 91% of day users said they were likely to return to this park in the future.

Table 22. Day user likelihood of returning and satisfaction with the park facilities and environment

	Day Users (%)
Satisfaction with natural environment ^a	95
Satisfaction with facilities and services ^a	84
Likelihood of returning ^b	91

^a Cell entries are percentages (%) of users who rated the characteristic as "satisfied" or "very satisfied."

^b Cell entries are percentages (%) of users who said they were "likely" or "very likely" to return to the park in the future.

Encounters, Norms, and Crowding. The concepts of reported encounters, perceived crowding, and norms (i.e., maximum acceptance or tolerance) have received considerable attention in the recreation literature. *Reported encounters* describe a subjective count of the number of other people that an individual remembers observing in an area. *Perceived crowding* is a subjective and negative evaluation that this reported number of encounters or people observed in an area is too many. Understanding users' reported encounters and perceived crowding, however, may not reveal maximum acceptable or tolerable use levels, or an understanding of how use should be managed and monitored. *Norms* offer a theoretical and applied basis to help address these issues. Norms are standards that individuals use for evaluating activities, environments, or management strategies as good or bad, better or worse, and they help to clarify what people believe conditions *should* or *should not be*. Research suggests that when users perceived an area to be crowded, they likely encountered more than their maximum acceptance (i.e., their norm) of impacts (e.g., use levels) for the particular setting (Manning, 2010; Needham & Rollins, 2009).

Table 23. Day user encounters, norms, and crowding

	Day Users (%)
Encounters with other people ^a	65.49
Perception of crowding ^b	3.52
Maximum tolerance for encountering other people (norm) ^c	124.39

^a Cell entries are mean numbers of people seen / encountered on users’ most recent trip. Median = 50, Mode = 50.

^b Cell entries are means on 9 point crowding scale of 1-2 “not at all crowded” to 3-4 “slightly crowded” to 5-7 “moderately crowded” to 8-9 “extremely crowded.” Median = 3, Mode = 1, Percent crowded = 62%.

^c Cell entries are mean maximum numbers of people that users would accept seeing / encountering. Median = 75, Mode = 100.

Table 23 shows that, on average, day users encountered approximately 65 other people on their visit at Devils Punch Bowl State Natural Area, but would be willing to accept encountering a maximum of approximately 124 other users. On average, day users felt slightly crowded, with 62% of day users having felt some degree of crowding on their visit. According to Shelby, Vaske, and Heberlein (1989) and Vaske and Shelby (2008), these results suggest that crowding at the day use areas can be considered “high normal” where visitation is probably not greater than carrying capacity but may be tending in that direction. Crowding should be studied if increased use is expected, allowing management to anticipate problems.

To estimate whether there are potential social carrying capacity problems at a recreation site, it is also important to examine relationships among encounters and norms. In particular, it is important to determine what proportion of users is encountering more people than they would tolerate at a site (i.e., their norm). Research has shown that when recreationists encounter more people than they believe are acceptable (i.e., their norm), they feel more crowded compared to those who encounter less than they would accept (Needham, Rollins, & Wood, 2004; Vaske & Donnelly, 2002). If many users are encountering more people than they feel are acceptable, management may need to address social capacity related issues (e.g., quotas, zoning).

Table 24. Relationships among day user encounters and norms

	Reported encounters compared to norm ^a	
	% Fewer encounters	% More encounters
Day Users	74	26

^a Percent of users who encountered either fewer than or more than their norm (minimum acceptable condition).

Table 24 shows relationships among encounters and norms at Devils Punch Bowl State Natural Area. In total, 74% of day users reported encountering fewer people than their norm; and 26% encountered more than their maximum tolerance. These results suggest that crowding among day users was reasonably low and most of these users were not encountering more people than they would tolerate.

Section Summary. Taken together, results in this section showed that:

- Day users considered the most important characteristics the park's absence of litter (94%), park cleanliness (e.g., lawn care, lack of graffiti; 92%), cleanliness of toilets (91%), parking for vehicles (80%), and the number of toilets (79%). The least important attributes were the amount of educational information (36%), facilities for groups to gather (41%), the presence of park rangers / personnel (43%), the quality of educational information (44%), and ease of movement / access (wheelchair, elderly, stroller; 47%).
- Overall satisfaction among day users was extremely high, as 94% were satisfied and almost no respondents (6%) were dissatisfied or neutral. In addition, the highest proportion of users was "very satisfied" (55%). The majority of day users were satisfied with most characteristics at Devils Punch Bowl State Natural Area. Day users were most satisfied with park cleanliness (91%), absence of litter (84%), number of toilets / bathrooms (83%), and personal safety (80%). Users were least satisfied with the amount and quality of educational information (47% to 48%), ease of movement / access (58%), and information provided about conditions / hazards (59%). Most day users (91%) said they were likely to return to this park in the future.
- An Importance – Performance analysis showed that all park attributes were in the "keep up the good work" category, indicating that users thought that staff were doing a good job managing conditions and experiences. There were, however, two attributes that was important to users, but these users were only slightly satisfied with the attribute. Managers should consider monitoring the cleanliness of toilets and parking for vehicles at the park.
- Crowding among day users was in the high normal range where visitation is probably not greater than carrying capacity, and most of these users were not encountering more people than they would tolerate. In the future, crowding should be studied if increased use is expected, allowing management to anticipate problems.

Attitudes about Management Strategies

Day users were asked the extent they opposed or supported several potential new strategies for the park. Table 25 shows that the most strongly supported strategies by day users were to provide more recycling containers (77%), more opportunities for viewing wildlife (69%), more trash cans (68%), more information / education (nature, history; 63%), and more opportunities for hiking (61%). The least supported strategies were to close the park to all recreation/tourism activities (11%), limit the number of people allowed in the park per day (18%), provide wireless internet access within the park (22%), and provide downloadable mobile phone applications (23%).

Table 25. Day user attitudes about management at the park

	Day Users (%) ^a
More recycling containers	77
More opportunities for viewing wildlife	69
More trash cans	68
More info / education (nature, history)	63
More opportunities for hiking	61
More opportunities for escaping crowds	55
Restore to historical conditions	54
Better maintenance / upkeep of facilities	50
Do not change anything / keep as is	47
More group picnic areas	45
Natural buffers block view of development	44
Require dogs be kept on leash at all times	44
Make park more pet friendly	39
More enclosed shelters	38
More paved trails	37
More programs led by rangers	32
Limit the number of large groups allowed	30
Downloadable mobile phone applications	23
Wireless internet access in park	22
Limit the number of people allowed per day	18
Close park to all recreation/tourism activities	11

^a Cell entries are percentages (%) of users whose response was “support” or “strongly support.”

Section Summary. Taken together, results in this section showed that:

- Day users most strongly supported management strategies that would provide more recycling containers (77%), opportunities for viewing wildlife (69%), trash cans (68%),

information / education (nature, history; 63%), and opportunities for hiking (61%). The least supported strategies were to close the park to all recreation/tourism activities (11%), limit the number of people allowed in the park per day (18%), provide wireless internet access within the park (22%), and provide downloadable mobile phone applications (23%).

Sociodemographic Characteristics of Users

Table 26 shows demographic characteristics of day users. There were more male (52%) than female (48%) day users at Devils Punch Bowl State Natural Area. The average age of respondents was 44 years old, and the largest proportions of users were 30 to 39 years old (22%) and 50 to 59 years old (22%). Almost all respondents were white (i.e., Caucasian; 95%) with few Asians (2%), Blacks / African Americans (1%), American Indian or Alaska natives (1%), Hispanic / Latinos (<1%), and Native Hawaiian or Pacific Islanders (<1%). The average annual household income before taxes of respondents was \$65,600, and the largest proportion of users had incomes from \$50,000 to \$69,999 (24%). Day-use visitors to Devils Punch Bowl State Natural Area are generally wealthier than the Oregon population at large (Oregon median household income in 2010 was \$51,994). Almost all day users (99%) considered English as the primary language in their homes.

Table 27 shows that 68% of day use visitors lived in Oregon, 9% resided in Washington State, 2% were from California, and 2% were from Idaho. Among day users, 28% lived in the Willamette Valley region (<http://www.guidetooregon.com/regions/map.html>), 18% resided in the Portland Metro region, 18% resided in the Coastal region, 2% resided in the Central region, 1% resided in the Mt. Hood / Gorge region, and 1% lived in the Southern region of Oregon. No visitors lived in the Eastern region of the state.

Table 26. Day user demographic characteristics

	Day Users (%) ^a
Gender	
Male	52
Female	48
Age	
Less than 20 years old	2
20 – 29 years	18
30 – 39 years	22
40 – 49 years	18
50 – 59 years	22
60 – 69 years	12
70 – 79 years	5
80+ years old	1
Average age (mean years)	44.27
Household income (before taxes)	
Less than \$10,000	5
\$10,000 – \$29,999	11
\$30,000 – \$49,999	13
\$50,000 – \$69,999	24
\$70,000 – \$89,999	16
\$90,000 – \$109,999	11
\$110,000 – \$129,999	7
\$130,000 – \$149,999	5
\$150,000 – \$169,999	1
\$170,000 or more	8
Average income (mean dollars)	65,600
Ethnicity	
White (Caucasian)	95
Asian	2
Black / African American	1
American Indian / Alaska Native	1
Native Hawaiian or Pacific Islander	<1
Hispanic / Latino	<1
Language spoken most often at home	
English	99
Other	1

^a Cell entries are percentages (%) unless specified as means or averages.

Table 27. Day user location of residence

	Day Users (%)
Country	
USA	97
Canada	3
State	
Oregon ^a	68
Other	19
Washington	9
California	2
Idaho	2

^a The largest percentage of day users were from the Willamette Valley region (28%), whereas 18% resided in the Portland Metro region, 18% resided in the Coastal Region, 2% resided in the Central region, 1% resided in the Mt. Hood / Gorge region, and 1% lived in the Southern region of Oregon. No visitors lived in the Eastern region of the state.

Table 28 shows that 82% of day users said that nobody in their group had a disability, whereas 18% had at least one group member with a disability. The most common disability was associated with walking (12% of day users), while 5% of day users had a hearing disability, 2% had a sight disability, 1% had a learning disability, and 3% had some other form of disability.

Table 28. Day user disabilities

	Day Users (%)
Disability in group	
No	82
Yes ^a	18

^a Types of disabilities: walking = 12%, hearing = 5%, learning = 1%, sight = 2%, other = 3%

Section Summary. Taken together, results in this section showed that:

- There were a few more males (52%) than females (48%) day users at this park.
- The average age of respondents was 44 years old, and the largest proportions of users were 30 to 39 years old (22%) and 50 to 59 years old (22%).
- The average annual household income before taxes of respondents was \$65,600, and the largest proportion of users had incomes from \$50,000 to \$69,999 (24%). Day-use visitors to Devils Punch Bowl State Natural Area are generally wealthier than the Oregon population at large (Oregon median household income in 2010 was \$51,994).

- Almost all respondents were white (i.e., Caucasian; 95%) with few Asians (2%), Blacks / African Americans (1%), American Indian or Alaska natives (1%), Hispanic / Latinos (<1%), and Native Hawaiian or Pacific Islanders (<1%).
- Almost all day users (99%) considered English as the primary language in their homes.
- Over 68% of day use visitors lived in Oregon, 9% resided in Washington State, 2% were from California, and 2% were from Idaho. Among day users, 28% lived in the Willamette Valley region (<http://www.guidetooregon.com/regions/map.html>), 18% resided in the Portland Metro region, 18% resided in the Coastal region, 2% resided in the Central region, 1% resided in the Mt. Hood / Gorge region, and 1% lived in the Southern region of Oregon. No visitors lived in the Eastern region of the state.
- 82% of day users said that nobody in their group had a disability, whereas 18% had at least one group member with a disability. The most common disability was associated with walking (12% of day users), while 5% of day users had a hearing disability, 2% had a sight disability, 1% had a learning disability, and 3% had some other form of disability.

RECOMMENDATIONS

Management Recommendations

Based on these results from survey of day users, the following recommendations, in no particular order, are proposed for management of Devils Punch Bowl State Natural Area:

- Most day users traveled to this park in their own vehicles (77%), so adequate parking is important and should be considered in planning and management.
- The average number of visitors per vehicle for Devils Punch Bowl State Natural Area day-use vehicles (2.96) was significantly lower than the current FMS assumption of 4.0 visitors per vehicle. Park managers may want to use this updated figure in future day-use calculations for the park.
- Almost all day users (94%) were satisfied with their experiences and the conditions at this park. Satisfaction, however, was consistently lower for the amount and quality of educational information (47% to 48%) and information provided about conditions / hazards (59%). Managers may wish to evaluate these services to users to insure they are meeting visitor needs.

- Users were also somewhat less satisfied with the ease of movement and access around the park (e.g., wheelchair, stroller, elderly; 58%). Given that over 18% of day-use visitors were over the age of 60 and 18% of day users had disabilities (12% with disabilities related to walking), managers may want to consider evaluating access throughout the park and perhaps even obtaining a current ADA or related audit.
- The results suggest that crowding at day-use areas is “high normal” where these areas have probably not exceeded social carrying capacity yet, but may be trending in that direction and use should be studied to see if increased use is expected, allowing management to anticipate problems. Monitoring and management of park use levels is needed, especially given that 55% of park users supported the provision of more opportunities for escaping crowds.
- The Importance – Performance analysis shows that all park attributes were in the “keep up the good work” category, indicating that users thought that staff were doing a good job managing conditions and experiences. However, this analysis showed that managers should consider examining the cleanliness of toilets and parking for vehicles at the park.
- Day user visitors most strongly supported strategies that would provide more recycling containers (77%), opportunities for viewing wildlife (69%), trash cans (68%), information / education (63%), and opportunities for hiking (61%). Managers may want to consider some or all of these strategies.
- Almost all park visitors (92%) were able to find the information they needed when planning their visit to Devils Punch Bowl State Natural Area. However, some visitors (8%) were not able to find all information needed. The most popular information needed was additional road signage, directions to the tidepool area trailhead, and park maps.
- A large proportion of day users (46%) depended on official internet websites as the primary source of obtaining information about state parks such as Devils Punch Bowl State Natural Area. Given these results, it is imperative for staff to ensure that agency and park internet websites are easy to navigate, up to date, and provide comprehensive information.
- Appendix A is a listing of 224 verbatim open ended positive comments (43 comments, 1 page) and negative comments and suggestions for improvement of Devils Punch Bowl State Natural Area (181 comments, 5 pages). Many comments may provide insights for

future planning and management. The most common concerns expressed needs for: (a) year-round warm water showers for surfers; (b) improving the trail to the tidepool area; (c) improved restrooms (i.e., soap dispensers, mirrors, etc.); (d) additional / improved signage both to and within park; (e) additional recycling / trash receptacles; f) additional parking (especially for large RVs); and making the park more ADA accessible.

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APPENDIX A: OPEN-ENDED COMMENTS

Positive Comments

- Awesome place. Thanks!
- Elevator. Love the place.
- Good.
- Great how it is except more parking.
- Great place.
- Great the way it is. Suggestion on how to get to the actual Devil's Punchbowl.
- I like it as it is.
- I like it just how it is, but maybe more trash/recycling receptacles.
- I love it!!
- I really like this park a lot. They should provide many hot showers for surfers.
- I think it's pretty great.
- It is great! We come every year!!
- It was lovely! More information about wildlife would be cool.
- It's a great place. I like it as is.
- It's about what I was looking for, a place to see scenery and wildlife. We're just passing through, although I'm not sure what someone staying for a while would look for.
- It's great.
- It's great for how I use it and would prefer that it stays the way it is.
- It's great here. Don't change anything.
- It's perfect.
- Keep being awesome. Also signs showing how to get to the 2 paths to the beach.
- Leave it as it is. It's wonderful.
- Love it! Love it!
- Love, love, love, love, love, love, it here. Amazing!
- Love the showers and dressing rooms.
- Loved Mo's was open. Loved squirrels.
- Loved the natural beauty of this park. Loved that we could access the inside of Punch Bowl. I was satisfied with everything during my visit.
- Lovely park. Had fun!!
- N/a. I love it.
- No ideas at this time. Thanks!!
- No significant suggestions at this time.
- None.
- Nothing!
- Nothing, loved it!
- Nothing. Beautiful.
- Nothing. It's great.
- Please keep it just the way it is. It is perfect
- Please provide doggy poop bags! Thanks! More security to prevent car break ins. No leash law is great. All dogs behaved better than humans. My favorite park!
- The park seems to be in very good condition, so I can't think of way to improve the park.
- This is the best place on the central coast. Thanks! Good job!
- Very clean always.

- We like it as is.
- We loved it!!
- Wonderful experience. The survey is too long.

Negative Comments and / or Issues for Improvement

- Keep the beaches clean. It's what we love about the Oregon Coast. Police the area to minimize criminal elements.
- More outdoor showers. Do not make it a marine reserve.
- Outside showers. Don't make it a marine reserve.
- Weed control. Need nice grass. Wheelchair asphalt installed and all trails wider for ADA accessibility. Warm showers outside. Horseshoe pit.
- A zipline down and a lift back up would be awesome!
- Allow alcohol in public parks.
- Allow dogs to be off leash.
- Allow fires on beach.
- Always keep beach pet-friendly and do not impose leash laws. Thank you.
- Another shower.
- As a surfer, it would be awesome to have a warm water shower after surfing. Thank you.
- Better cleanliness of restrooms and changing room.
- Better picnic / bathrooms.
- Better restroom.
- Better restrooms and more showers.
- Better showers and changing area in restroom. Crosswalk to stairs safer! Soap and mirror in bathroom.
- Better signage.
- Better signage to get down to the bowl.
- Better signs. Map of site.
- Better staircase. Better bathroom supplies (soap and mirror clean).
- Bike racks.
- Campsites.
- Clean. Parking facilities.
- Cleaner restrooms.
- Cleaner restrooms. Soap and better marked signs.
- Clear sign on highway stating "Devil's Punch Bowl Next Right/Left." Shorter survey. People have limited extra time.
- Covered picnic area.
- Covered picnic tables.
- Discourage feeding of squirrels before someone gets bitten.
- Don't get so personal with your surveys! My income and ethnicity have no bearing on this park.
- Do something about the perpetual urine smell in the men's restroom. Provide an area to hang rinsed wet suits. Maybe one or two more picnic tables! Thank you very much!
- Dogs can be off leash!
- Don't charge for parking. Survey too long.
- Elevator instead of stairs.
- Elevator. Love the place.

- Enforce leash laws or ban dogs altogether.
- Enjoy Devil's Punch Bowl. I am satisfied with park, however I think more funding/personnel would be helpful.
- Escalator down to beach. Margarita stand?
- Fix the marine garden trail so we can all use it. The rest of the park is great. Too hard to get to marine gardens. It is nearly impossible. Marine gardens are a big part of the park!
- Fix the marine gardens trail. We used to fish in the marine gardens all the time for 44 years but can no longer walk the trail.
- Fix the toilets and clean the restrooms. They were gross!!
- Fix the walking trail to the beach.
- Great how it is except more parking.
- Great park. Better shower facilities would be great.
- Hand rails on the trail down for younger kids.
- Handicapped ramp in parking lot needs to be redone or move the space over so that you can use the ramp. Make the path from the parking lot to the restroom building less steep. Too steep for wheelchairs.
- Have more volunteers to explain the history of the area and the reason we need to protect this area.
- Hot shower!
- Hot showers for people using the ocean.
- Hot showers please.
- Hot showers please.
- Hot showers that work year round. Indoor area for picnic/observation.
- Hot showers.
- I appreciate clean and safe facilities for changing in/out of wet suit for surfing.
- I like it just how it is, but maybe more trash/recycling receptacles.
- I really like this park a lot. They should provide many hot showers for surfers.
- Improve access (ease of getting down to beach) to marine gardens.
- Improve access trail and increase parking.
- Improve accessibility for handicapped older folks!
- Improve signage to punch bowl.
- Improve the appearance of some of the buildings in the area.
- Improve the path to the marine gardens. It is dangerous and a safety issue. Thank you.
- Improve trail to marine gardens and provide directions to the marine gardens.
- Inventory too long for casual survey of visitors.
- It was lovely! More information about wildlife would be cool.
- Just empty the trash and keep bathrooms clean.
- Keep as natural as possible.
- Keep bathrooms open all year functioning and showers too.
- Keep being awesome. Also signs showing how to get to the 2 paths to the beach.
- Keep it clean and natural.
- Keep it clean!
- Keep preserving its' natural state as much as possible!
- Keep showers and make beach ADA accessible if possible.
- Keep the showers working. Provide soap in the bathroom.
- Landscaping too many trees to see beach. More picnic tables. Places to BBQ and hot water.

- Leave it alone other than better access for disabled.
- Leave it as it is.
- Leave it as it is. It's wonderful.
- Leave more walk-in campgrounds available.
- Leave water on during winter time.
- Less people!
- Less tourists.
- Let dogs run off leashes.
- Maintain marine garden trail with permanent structure. Crosswalk at trailhead to beach.
- Make surveys shorter.
- Mirrors in bathroom. More inside shower areas and more showers.
- Missed turn off from 101S and it's next to impossible to turn around. Please fix. Very dangerous. Daughter wants steps from existing path to rocks above Punch Bowl.
- More access to park data (i.e., videos, surfboard activities, and marine garden access/data).
- More changing stations. Hot showers. Great surfing place.
- More education. No more rules. Just focus on respect and ability to enjoy recreation / natural beauty.
- More education-geology info. Whale watching info. Discourage people from feeding squirrels. Teach them of dangers of "cute" wild animals.
- More facilities to support recreational use.
- More on-site rangers.
- More parking by the stairs to the beach. More restrooms and walking trail access to Otter Rock Beach (on the inn at Otter Rock side).
- More parking?
- More picnic tables.
- More recycle bins and trim bushes around viewing area.
- More recycling and dog poo pick up stations.
- More recycling bins. Clear away bushes blocking the view to the punch bowl. Other than that, I enjoyed my visit.
- More recycling/compost bins! I didn't see any poop, but dog poop pickup bags needed.
- More RV parking please.
- More RV parking. Too difficult to park. Loved seeing the punch bowl 2X at high tide and low tide. Walked through the bowl!
- More RV parking.
- More showers.
- More showers for surfers and bathers (swimmers).
- More showers. I love to see park rangers periodically and bathroom upgrade (dismal and dark).
- More showers. Sheltered picnic area. Crosswalk to beach and speed bumps.
- More showers. Update bathrooms. Cover septic tank with deck. More picnic tables.
- More signage and bathrooms.
- More signs and information.
- More signs and survey is too long.
- More surf activities.
- More trails and signs please!
- More waves!

- Mow the grass more. Keep the showers and drinking fountain working!
- Need better beach access.
- Need longer spaces for RV parking in second lot. Move RV parking sign to before the turn.
- Need some general gifts and stuff like batteries for cameras.
- Need warm showers and water all year long.
- Never have such a ridiculously detailed questionnaire.
- New picnic tables.
- Nicer bathrooms. More and nicer picnic tables. Maybe a covered shelter. Improve trail to marine gardens.
- None of your business. Do not have such a long survey. Too many questions. Need just about 10.
- Not enough signs about directions within the park. Speed bumps would work well here! Signage about directions to the park could be better. Hot showers for the surfers. Easy access for strollers/wheelchairs. All in all a very nice park.
- Offer poop bags for pet owners. Mow and take away lawn clippings. Asphalt sidewalks near restrooms. Repair access to marine gardens. Check metal mounts on staircase railing to beach! Some are loose or gone.
- One or two more picnic tables.
- One ranger or information person on duty would be most welcome, especially in summer! One covered picnic area between the two parking lots would be great!
- Parking.
- Please have biodegradable doggy poop bags dispensary. I would be willing to sponsor one at Devil's Punch Bowl Park.
- Please improve trail to beach. Many falls have occurred in our family over the past 10 years of visiting. Thank you.
- Please provide doggy poop bags! Thanks! Car safety to prevent break ins. No leash law is great. All dogs behaved better than humans. My favorite park!
- Please put signage up for restrooms. Also, please put soap in the bathrooms. Thanks. It's beautiful here.
- Provide a shorter survey.
- Provide a trail down to the marine gardens that can be safely used. Presently, you have to be a mountaineer to navigate the hazards of the trail! Your park system has provided an accident waiting to happen!
- Provide better viewing platforms for punch bowl.
- Put an elevator so people with disabilities can go to the beach!
- Ranger talks.
- Recycle containers.
- Redo men's restroom.
- Repair trail to marine gardens.
- Replant pine trees that have been lost to storms in the last 10 years.
- Reserve a portion for campsites open for walk-ins! Provide environmental marine interpretation posters or talks.
- Safe crossing from parking lot to beach stairway.
- Shorten the survey.
- Shorter surveys.
- Showers in winter

- Signs
- Signs! We parked in the designated lot but had no idea which direction to walk to see the Devil's Punch Bowl. Oregon has great signage and info tablets but none here? Survey is too long.
- Slow down traffic. Redo the trail to marine gardens. Plant or have community plant trees on the upper park area by the punch bowl.
- Soap and paper towels.
- Soap and toilet covers for all state parks would be nice. The telescopes didn't work (either of them).
- Soap in bathrooms.
- Soap/sanitizer in the washrooms.
- Stairway for surfers vs. others.
- Steps down to the tidepools. Current path is very easy to slip on.
- Student....broke. One more shower, soap, and water in bathroom.
- Surfer etiquette sign.
- Survey too lengthy.
- Survey way too long! Takes too much time.
- Thank you state parks for making improvements to the marine gardens trail. I'm happy to once again see families heading down the trail.
- The dog poop is too much. Have dog area away from the picnic tables.
- There are trees so full and high they are blocking view of the ocean from the park. It's very annoying.
- This is way too long. 10 questions would be best. Better bathrooms with soap. Better signage.
- Too long of a survey.
- Tow rope / elevator for surfing equipment. Easier walk to the beach.
- Tram to beach.
- Transportation from parking to beach. Beach had a bit of trash near upper water line. Soap dispensers in bathroom.
- Update bathrooms.
- Update bathrooms.
- Update restrooms and have better maintenance. Tram or tow rope up from beach would be terrific! Survey is too long.
- Update restrooms. Larger and more changing areas.
- Very nice thank you! More showers would be good, and more signs would be nice.
- Warm showers.
- Warm showers and water all winter.
- Warm showers and bigger waves.
- Warm water in bathrooms that are cleaner (smell wise).
- Warm year-round showers.
- Warnings at top of stairs about slippery/uneven surfaces. Signs about marine reserve (to educate visitors). Warnings at top about rip tide that often runs alongside the south part of Devil's Punch Bowl.
- We would like more plant and animal information. Also sites to look for.
- Wonderful experience. The survey is too long.
- Year-round showers please!!

APPENDIX B: QUESTIONNAIRE

**Day Visitor Experiences and Perceptions
at Devils Punch Bowl State Natural Area**



Please Complete this Survey and Return it as Soon as Possible

Participation is Voluntary and Responses are Anonymous

Thank You for Your Participation

A Study Conducted Cooperatively by:



We are conducting this survey to learn about your experiences at Devils Punch Bowl State Natural Area (SNA). Your input is important and will assist managers improve your experiences at this park. **Once you have completed this survey, please return it as soon as possible.**

1. Before this trip, had you ever visited Devils Punch Bowl SNA? (**check ONE**)
 - No
 - Yes → if yes, how many day trips have you made to this park in the past 12 months? (**write number**) _____ trip(s)

2. How many hours did you spend at Devils Punch Bowl SNA on this trip? (**write number**) _____ hour(s)

3. Please check **all** recreation activities you did at Devils Punch Bowl SNA on this trip. (**check ALL THAT APPLY**)

<input type="checkbox"/> A. Hiking or walking	<input type="checkbox"/> F. Exploring tidepools	<input type="checkbox"/> K. Bird or wildlife watching
<input type="checkbox"/> B. Dog walking	<input type="checkbox"/> G. Sightseeing	<input type="checkbox"/> L. Swimming/ wading
<input type="checkbox"/> C. Running or jogging	<input type="checkbox"/> H. Picnicking or barbecuing	<input type="checkbox"/> M. Fishing
<input type="checkbox"/> D. Bicycling on local roads	<input type="checkbox"/> I. Surfing/ boogie boarding	<input type="checkbox"/> N. Ranger-led program(s)
<input type="checkbox"/> E. Beachcombing	<input type="checkbox"/> J. Kite flying	<input type="checkbox"/> O. Other (write response) _____

4. From activities in Question 3 above, what **ONE primary activity** did you do at Devils Punch Bowl SNA on this trip? (**write a letter that matches your response**)
Letter for primary activity _____

5. Which of the following best describes the purpose of your trip? (**check ONE**)
 - Primarily for recreation – this park was my main destination
 - Primarily for recreation – my main destination was NOT this park
 - Primarily for business, family, or other reasons – this park was a side trip
 - Some other reason

6. About how far from your home did you travel to get to this park? (**write number of miles**) _____ mile(s)

7. Overall, how dissatisfied or satisfied were you with your **overall experience** at Devils Punch Bowl SNA? (**check ONE**)
 - Very Dissatisfied Dissatisfied Neither Satisfied Very Satisfied

8. How dissatisfied or satisfied were you with the **natural environment** at Devils Punch Bowl SNA? (**check ONE**)
 - Very Dissatisfied Dissatisfied Neither Satisfied Very Satisfied

9. How dissatisfied or satisfied were you with the **facilities / services** at Devils Punch Bowl SNA? (**check ONE**)
 - Very Dissatisfied Dissatisfied Neither Satisfied Very Satisfied

10. How unlikely or likely are you to return to Devils Punch Bowl SNA in the future? (**check ONE**)
 - Very Unlikely Unlikely Neither Likely Very Likely

11. How **important** is it to you that each of the following is at Devils Punch Bowl SNA? (**circle one number for EACH**)

	Not Important		Neither		Extremely Important
Overall cleanliness of park (e.g., graffiti, lawn care).	1	2	3	4	5
Number of toilets / bathrooms.	1	2	3	4	5
Cleanliness / conditions of toilets / bathrooms.	1	2	3	4	5
Absence of litter.	1	2	3	4	5
Presence of park rangers / personnel.	1	2	3	4	5
Courteousness of park rangers / personnel.	1	2	3	4	5
Number of park trails.	1	2	3	4	5
Condition / maintenance of park trails.	1	2	3	4	5
Ease of movement or access (e.g., wheelchair, elderly, baby stroller).	1	2	3	4	5
Facilities for groups to gather.	1	2	3	4	5
Variety of things to do.	1	2	3	4	5
Personal safety.	1	2	3	4	5
Number of information / education programs or materials.	1	2	3	4	5
Quality of information / education programs or materials.	1	2	3	4	5
Information specifically about conditions or hazards in the park.	1	2	3	4	5
Signs about directions within the park.	1	2	3	4	5
Signs about directions to the park.	1	2	3	4	5
Parking for vehicles.	1	2	3	4	5

12. Now, how **dissatisfied or satisfied** were you with the following at Devils Punch Bowl SNA? (**circle a number for EACH**)

	Very Dissatisfied	Dissatisfied	Neither	Satisfied	Very Satisfied
Overall cleanliness of park (e.g., graffiti, lawn care).	1	2	3	4	5
Number of toilets / bathrooms.	1	2	3	4	5
Cleanliness / conditions of toilets / bathrooms.	1	2	3	4	5
Absence of litter.	1	2	3	4	5
Presence of park rangers / personnel.	1	2	3	4	5
Courteousness of park rangers / personnel.	1	2	3	4	5
Number of park trails.	1	2	3	4	5
Condition / maintenance of park trails.	1	2	3	4	5
Ease of movement or access (e.g., wheelchair, elderly, stroller).	1	2	3	4	5
Facilities for groups to gather.	1	2	3	4	5
Variety of things to do.	1	2	3	4	5
Personal safety.	1	2	3	4	5
Number of information / education programs or materials.	1	2	3	4	5
Quality of information / education programs or materials.	1	2	3	4	5
Information specifically about conditions or hazards in the park.	1	2	3	4	5
Signs about directions within the park.	1	2	3	4	5
Signs about directions to the park.	1	2	3	4	5
Parking for vehicles.	1	2	3	4	5

13. Approximately how many people did you see at Devils Punch Bowl SNA on this trip? (**write a number**)

I saw about _____ other people

14. To what extent did you feel crowded at Devils Punch Bowl SNA on this trip? (**circle a number**)

1	2	3	4	5	6	7	8	9
Not at all Crowded		Slightly Crowded			Moderately Crowded		Extremely Crowded	

15. What is the maximum number of other people that you would tolerate seeing at Devils Punch Bowl SNA on a trip? (**write a number or check one of the other two responses**)

It is OK to see as many as _____ other visitors at this park

- OR** The number of people does not matter to me
 The number of people matters to me, but I cannot specify a number

16. Imagine that you were to visit Devils Punch Bowl SNA and see more people than you would tolerate seeing. If this situation were to occur, how likely would you take each of the following actions? (**circle one number for EACH**)

I would ...	Very Unlikely	Unlikely	Likely	Very Likely
... express my opinions to park managers about the condition or situation.	1	2	3	4
... express my opinions to members of my group about the condition or situation.	1	2	3	4
... express my opinions to other visitors at the park about the condition or situation.	1	2	3	4
... express my opinions to friends or family about the condition or situation.	1	2	3	4
... express my opinions by writing reviews about the condition or situation (e.g., internet review websites, blogs, newspaper editorial).	1	2	3	4
... keep my opinions to myself.	1	2	3	4
... avoid peak use times (weekends, holidays) or visit earlier or later in the day when fewer people are here to avoid this condition or situation.	1	2	3	4
... come back to this park, but recognize that it offers a different type of experience than I first believed.	1	2	3	4
... tell myself that there is nothing I can do about the condition or situation, so just try to enjoy the experience for what it is.	1	2	3	4
... accept the condition or situation by not doing anything about it.	1	2	3	4
... never visit this park again because of the condition or situation.	1	2	3	4

17. To what extent do you disagree or agree with each of the following statements? (**circle one number for EACH statement**)

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
This park is very special to me.	1	2	3	4	5
This park is one of the best places for doing what I like to do.	1	2	3	4	5
I am very attached to this park.	1	2	3	4	5
I would not substitute any other area for doing what I do at this park.	1	2	3	4	5
I identify strongly with this park.	1	2	3	4	5
No other place compares to this park.	1	2	3	4	5
I feel that this park means a lot to me.	1	2	3	4	5
I get more satisfaction out of visiting this park than any other.	1	2	3	4	5

18. To what extent do you **oppose or support** each of the following possible management actions at Devils Punch Bowl SNA? **(circle one number for EACH)**

	Strongly Oppose	Oppose	Neither	Support	Strongly Support
Provide more opportunities for escaping crowds of people.	1	2	3	4	5
Provide more opportunities for viewing wildlife.	1	2	3	4	5
Provide more group picnic areas.	1	2	3	4	5
Provide more opportunities for hiking.	1	2	3	4	5
Provide more paved trails.	1	2	3	4	5
Provide more trash cans.	1	2	3	4	5
Provide more recycling containers.	1	2	3	4	5
Provide more information / education about nature, history, or archeology.	1	2	3	4	5
Provide more programs led by park rangers.	1	2	3	4	5
Provide wireless internet access within the park.	1	2	3	4	5
Provide downloadable mobile phone applications.	1	2	3	4	5
Provide more enclosed shelters.	1	2	3	4	5
Improve maintenance or upkeep of facilities / services.	1	2	3	4	5
Require all dogs be kept on leash at all times.	1	2	3	4	5
Make the park more pet friendly.	1	2	3	4	5
Provide natural buffers to block views of development outside the park.	1	2	3	4	5
Restore it to historical conditions (e.g., replace non-native with native plants)	1	2	3	4	5
Limit the number of people allowed per day.	1	2	3	4	5
Limit the number of large groups allowed (e.g., no more than 10-20 people).	1	2	3	4	5
Close this park to all recreation / tourism activities.	1	2	3	4	5
Do not change anything / keep things as they are now.	1	2	3	4	5

19. **Including yourself**, how many people accompanied you at Devils Punch Bowl SNA on this trip? _____ person(s)

20. Did you or anyone in your group bring dog(s) with you to Devils Punch Bowl SNA? (**check ONE**) No Yes

21. Did anyone in your group have a disability?

No

Yes → if yes, what are these disabilities? (**check ALL THAT APPLY**) Hearing Sight

Walking

Learning Other

22. If you had NOT been able to go to Devils Punch Bowl SNA for this visit, what would you have done? (**check ONE**)

Gone somewhere else for the same activity → how far from home is the place you would go instead? _____ miles(s)

Gone somewhere else for a different activity → how far from home is the place you would go instead? _____ miles(s)

Come back another time

Stayed home

Gone to work at my regular job

Something else (none of these)

23. How did you get to Devils Punch Bowl SNA on this trip? (**check ONE**)

- My family's personal vehicle → how many total people were in the vehicle? _____ person(s)
- Somebody else's personal vehicle → how many total people were in the vehicle? _____ person(s)
- Other (write response) _____

24. When you were thinking about visiting an Oregon State Park such as Devils Punch Bowl SNA, about how often did you obtain information from each of the following sources when making your decision? (**circle one number for EACH**)

	Never		Sometimes		Often
A. Official internet websites (e.g., Oregon State Parks, Travel Oregon).	1	2	3	4	5
B. Social media internet websites (e.g., Facebook, Twitter).	1	2	3	4	5
C. Brochures.	1	2	3	4	5
D. Newspapers.	1	2	3	4	5
E. Magazines.	1	2	3	4	5
F. Books.	1	2	3	4	5
G. Television.	1	2	3	4	5
H. Videos / DVDs.	1	2	3	4	5
I. Radio.	1	2	3	4	5
J. Community organization or church.	1	2	3	4	5
K. Health care providers.	1	2	3	4	5
L. Work.	1	2	3	4	5
M. Friends or family members.	1	2	3	4	5
N. Highway signs.	1	2	3	4	5
O. Previous visit.	1	2	3	4	5
P. Other (write response) _____	1	2	3	4	5

25. From the list of sources in question 24 above, which **ONE** would you use **FIRST** when obtaining information about an Oregon State Park? (**write letter**)

Letter _____

26. When planning your visit to Devils Punch Bowl SNA, were you able to find the information you needed? (**check ONE**)

- Yes
- No → if no, what additional information did you need? (**write response**) _____

27. For each of the following categories, please estimate how much you and other members of your party spent and plan to spend on this trip within **30 miles** of Devils Punch Bowl SNA. **Please round off to the nearest dollar.**

- Motel, lodge, cabin, B&B, other lodging: \$ _____ .00
- Camping: \$ _____ .00
- Restaurants and bars: \$ _____ .00
- Groceries: \$ _____ .00
- Gasoline and oil: \$ _____ .00
- Park entry, parking, or recreation use fees: \$ _____ .00
- Recreation and equipment (guide fees, equipment rental): \$ _____ .00
- Souvenirs, clothing, and other miscellaneous: \$ _____ .00

28. Are you staying away from home within 30 miles of Devils Punch Bowl SNA on this trip? (**check ONE**)

No

Yes → if yes, how many nights are you staying away from home within 30 miles of this park? _____ night(s)

29. Are you: (**check ONE**) Male Female

30. How old are you? (**write response**) _____ years old

31. Which of the following best describes you? (**check ONE**)

White (Caucasian)

Hispanic / Latino

American Indian or Alaskan Native

Other (write response)

Black / African American

Asian

Native Hawaiian or Pacific Islander

32. What language is spoken most often at your home? (**check ONE**)

English

Spanish

Russian

Other (write response) _____

33. Where do you live? (**write responses**) City / town _____ State _____ Country _____ Zipcode _____

34. Which of these broad categories best describes your *current annual household income before taxes*? (**check ONE**)

Less than \$10,000

\$90,000 to \$109,999

\$10,000 to \$29,999

\$110,000 to \$129,999

\$30,000 to \$49,999

\$130,000 to \$149,999

\$50,000 to \$69,999

\$150,000 to \$169,999

\$70,000 to \$89,999

\$170,000 or more

Please tell us how we can improve Devils Punch Bowl SNA:

Thank you, your input is important! *Please return this survey as soon as possible.*

APPENDIX C: UNCOLLAPSED PERCENTAGES

Day Visitor Experiences and Perceptions at Devils Punch Bowl State Natural Area



Please Complete this Survey and Return it as Soon as Possible

Participation is Voluntary and Responses are Anonymous

Thank You for Your Participation

A Study Conducted Cooperatively by:



We are conducting this survey to learn about your experiences at Devils Punch Bowl State Natural Area (SNA). Your input is important and will assist managers improve your experiences at this park. **Once you have completed this survey, please return it as soon as possible.**

1. Before this trip, had you ever visited Devils Punch Bowl SNA? (**check ONE**)
 - 30% No
 - 70% Yes → if yes, how many day trips have you made to this park in the past 12 months? M=16.55 see report trip(s)

2. How many hours did you spend at Devils Punch Bowl SNA on this trip? (**write number**) M=2.88 hour(s)

3. Please check **all** recreation activities you did at Devils Punch Bowl SNA on this trip. (**check ALL THAT APPLY**)

65% A. Hiking or walking	38% F. Exploring tidepools	27% K. Bird or wildlife watching
21% B. Dog walking	49% G. Sightseeing	25% L. Swimming/ wading
10% C. Running or jogging	18% H. Picnicking or barbecuing	3% M. Fishing
4% D. Bicycling on local roads	38% I. Surfing/ boogie boarding	1% N. Ranger-led program(s)
40% E. Beachcombing	7% J. Kite flying	9% O. Other (write response)

4. From activities in Question 3 above, what **ONE primary activity** did you do at Devils Punch Bowl SNA on this trip? (**write a letter that matches your response**)

Letter for primary activity see report

5. Which of the following best describes the purpose of your trip? (**check ONE**)
 - 53% Primarily for recreation – this park was my main destination
 - 35% Primarily for recreation – my main destination was NOT this park
 - 9% Primarily for business, family, or other reasons – this park was a side trip
 - 4% Some other reason

6. About how far from your home did you travel to get to this park? (**write number of miles**) M=349.26 mile(s)

7. Overall, how dissatisfied or satisfied were you with your **overall experience** at Devils Punch Bowl SNA? (**check ONE**)

5% Very Dissatisfied	0% Dissatisfied	1% Neither	38% Satisfied	55% Very Satisfied
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8. How dissatisfied or satisfied were you with the **natural environment** at Devils Punch Bowl SNA? (**check ONE**)

2% Very Dissatisfied	1% Dissatisfied	2% Neither	39% Satisfied	56% Very Satisfied
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9. How dissatisfied or satisfied were you with the **facilities / services** at Devils Punch Bowl SNA? (**check ONE**)

2% Very Dissatisfied	5% Dissatisfied	10% Neither	56% Satisfied	28% Very Satisfied
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10. How unlikely or likely are you to return to Devils Punch Bowl SNA in the future? (**check ONE**)

3% Very Unlikely	1% Unlikely	5% Neither	31% Likely	61% Very Likely
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11. How *important* is it to you that each of the following is at Devils Punch Bowl SNA? (circle one number for EACH)

	Not Important		Neither		Extremely Important
Overall cleanliness of park (e.g., graffiti, lawn care).	1%	1%	6%	43%	49%
Number of toilets / bathrooms.	2%	4%	15%	41%	38%
Cleanliness / conditions of toilets / bathrooms.	1%	1%	8%	41%	50%
Absence of litter.	1%	1%	5%	40%	54%
Presence of park rangers / personnel.	13%	10%	33%	30%	13%
Courteousness of park rangers / personnel.	6%	5%	18%	42%	31%
Number of park trails.	8%	5%	28%	40%	19%
Condition / maintenance of park trails.	5%	3%	23%	43%	26%
Ease of movement or access (e.g., wheelchair, elderly, baby stroller).	12%	12%	30%	28%	19%
Facilities for groups to gather.	13%	15%	32%	27%	14%
Variety of things to do.	9%	7%	31%	33%	19%
Personal safety.	5%	4%	22%	37%	34%
Number of information / education programs or materials.	13%	15%	37%	26%	10%
Quality of information / education programs or materials.	12%	11%	33%	31%	12%
Information specifically about conditions or hazards in the park.	4%	7%	22%	41%	27%
Signs about directions within the park.	7%	5%	22%	43%	23%
Signs about directions to the park.	7%	8%	19%	39%	28%
Parking for vehicles.	2%	3%	14%	44%	37%

12. Now, how *dissatisfied or satisfied* were you with the following at Devils Punch Bowl SNA? (circle a number for EACH)

	Very Dissatisfied	Dissatisfied	Neither	Satisfied	Very Satisfied
Overall cleanliness of park (e.g., graffiti, lawn care).	1%	2%	6%	53%	39%
Number of toilets / bathrooms.	2%	6%	9%	51%	32%
Cleanliness / conditions of toilets / bathrooms.	3%	8%	15%	45%	30%
Absence of litter.	2%	3%	11%	45%	39%
Presence of park rangers / personnel.	2%	3%	35%	36%	25%
Courteousness of park rangers / personnel.	1%	0%	25%	37%	36%
Number of park trails.	2%	4%	30%	45%	19%
Condition / maintenance of park trails.	4%	5%	22%	48%	22%
Ease of movement or access (e.g., wheelchair, elderly, stroller).	4%	7%	31%	41%	18%
Facilities for groups to gather.	3%	5%	32%	44%	17%
Variety of things to do.	1%	1%	24%	48%	26%
Personal safety.	2%	2%	16%	53%	28%
Number of information / education programs or materials.	4%	7%	42%	31%	17%
Quality of information / education programs or materials.	4%	6%	42%	32%	17%
Information specifically about conditions or hazards in the park.	4%	5%	32%	39%	20%
Signs about directions within the park.	5%	7%	26%	43%	18%
Signs about directions to the park.	4%	7%	23%	44%	21%
Parking for vehicles.	2%	7%	20%	49%	23%

13. Approximately how many people did you see at Devils Punch Bowl SNA on this trip? (**write a number**)

I saw about M=65.49 other people

14. To what extent did you feel crowded at Devils Punch Bowl SNA on this trip? (**circle a number**)

22%	17%	18%	9%	12%	16%	4%	2%	1%
Not at all Crowded		Slightly Crowded			Moderately Crowded		Extremely Crowded	

15. What is the maximum number of other people that you would tolerate seeing at Devils Punch Bowl SNA on a trip? (**write a number or check one of the other two responses**)

It is OK to see as many as M=124.39 other visitors at this park

- OR** The number of people does not matter to me
 The number of people matters to me, but I cannot specify a number

16. Imagine that you were to visit Devils Punch Bowl SNA and see more people than you would tolerate seeing. If this situation were to occur, how likely would you take each of the following actions? (**circle one number for EACH**)

I would ...	Very Unlikely	Unlikely	Likely	Very Likely
... express my opinions to park managers about the condition or situation.	44%	31%	19%	7%
... express my opinions to members of my group about the condition or situation.	23	25	37	16
... express my opinions to other visitors at the park about the condition or situation.	36	33	28	4
... express my opinions to friends or family about the condition or situation.	17	23	48	13
... express my opinions by writing reviews about the condition or situation (e.g., internet review websites, blogs, newspaper editorial).	45	28	20	6
... keep my opinions to myself.	18	30	38	14
... avoid peak use times (weekends, holidays) or visit earlier or later in the day when fewer people are here to avoid this condition or situation.	12	12	48	29
... come back to this park, but recognize that it offers a different type of experience than I first believed.	11	17	54	17
... tell myself that there is nothing I can do about the condition or situation, so just try to enjoy the experience for what it is.	13	19	46	22
... accept the condition or situation by not doing anything about it.	14	24	46	16
... never visit this park again because of the condition or situation.	49	31	17	4

17. To what extent do you disagree or agree with each of the following statements? (**circle one number for EACH statement**)

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
This park is very special to me.	1%	2%	28%	32%	37%
This park is one of the best places for doing what I like to do.	2	2	23	41	31
I am very attached to this park.	1	6	37	26	30
I would not substitute any other area for doing what I do at this park.	2	16	37	21	24
I identify strongly with this park.	2	7	34	28	29
No other place compares to this park.	3	15	35	27	20
I feel that this park means a lot to me.	1	7	33	27	32
I get more satisfaction out of visiting this park than any other.	3	13	38	24	23

18. To what extent do you *oppose or support* each of the following possible management actions at Devils Punch Bowl SNA? (circle one number for EACH)

	Strongly Oppose	Oppose	Neither	Support	Strongly Support
Provide more opportunities for escaping crowds of people.	2%	1%	42%	39%	16%
Provide more opportunities for viewing wildlife.	1%	0%	30%	44%	25%
Provide more group picnic areas.	5%	8%	43%	33%	12%
Provide more opportunities for hiking.	3%	2%	35%	41%	20%
Provide more paved trails.	10%	13%	40%	21%	16%
Provide more trash cans.	1%	2%	29%	49%	19%
Provide more recycling containers.	1%	1%	21%	47%	31%
Provide more information / education about nature, history, or archeology.	1%	2%	34%	38%	25%
Provide more programs led by park rangers.	4%	11%	53%	22%	10%
Provide wireless internet access within the park.	25%	16%	37%	13%	10%
Provide downloadable mobile phone applications.	19%	17%	41%	14%	9%
Provide more enclosed shelters.	9%	10%	43%	28%	10%
Improve maintenance or upkeep of facilities / services.	1%	3%	46%	33%	17%
Require all dogs be kept on leash at all times.	16%	13%	28%	22%	22%
Make the park more pet friendly.	6%	10%	46%	26%	13%
Provide natural buffers to block views of development outside the park.	5%	9%	42%	30%	14%
Restore it to historical conditions (e.g., replace non-native with native plants)	4%	7%	35%	32%	21%
Limit the number of people allowed per day.	26%	22%	35%	12%	5%
Limit the number of large groups allowed (e.g., no more than 10-20 people).	17%	18%	35%	21%	9%
Close this park to all recreation / tourism activities.	55%	16%	17%	6%	5%
Do not change anything / keep things as they are now.	5%	6%	42%	30%	18%

19. Including yourself, how many people accompanied you at Devils Punch Bowl SNA on this trip? M=3.64 person(s)

20. Did you or anyone in your group bring dog(s) with you to Devils Punch Bowl SNA? (check ONE) 75% No 25% Yes

21. Did anyone in your group have a disability?

82% N

18% Yes → if yes, what are these disabilities? 5% Hearing 2% Sight 12% Walking
1% Learning 3% Other

22. If you had NOT been able to go to Devils Punch Bowl SNA for this visit, what would you have done? (check ONE)

62% Gone somewhere else for the same activity → how far from home is the place you would go instead?

5% Gone somewhere else for a different activity → how far from home is the place you would go instead?

16% Come back another time

6% Stayed home

1% Gone to work at my regular job

11% Something else (none of these)

23. How did you get to Devils Punch Bowl SNA on this trip? (**check ONE**)

- 77% My family's personal vehicle → how many total people were in the vehicle? M=2.81 person(s)
- 10% Somebody else's personal vehicle → how many total people were in the vehicle? M=3.85 person(s)
- 13% Other (write response) see report

24. When you were thinking about visiting an Oregon State Park such as Devils Punch Bowl SNA, about how often did you obtain information from each of the following sources when making your decision? (**circle one number for EACH**)

	Never		Sometimes		Often
A. Official internet websites (e.g., Oregon State Parks, Travel Oregon).	37%	6%	26%	13%	18%
B. Social media internet websites (e.g., Facebook, Twitter).	64%	8%	15%	8%	5%
C. Brochures.	51%	9%	24%	10%	7%
D. Newspapers.	63%	11%	18%	5%	3%
E. Magazines.	55%	11%	23%	9%	2%
F. Books.	57%	10%	24%	7%	3%
G. Television.	68%	10%	15%	5%	2%
H. Videos / DVDs.	72%	9%	15%	3%	1%
I. Radio.	69%	12%	13%	4%	2%
J. Community organization or church.	76%	10%	10%	2%	2%
K. Health care providers.	79%	11%	7%	2%	2%
L. Work.	71%	10%	11%	7%	1%
M. Friends or family members.	27%	3%	23%	25%	22%
N. Highway signs.	30%	7%	27%	23%	13%
O. Previous visit.	26%	3%	16%	18%	36%
P. Other (write response) _____	59%	2%	18%	5%	16%

25. From the list of sources in question 24 above, which **ONE** would you use **FIRST** when obtaining information about an Oregon State Park? (**write letter**)

Letter see report

26. When planning your visit to Devils Punch Bowl SNA, were you able to find the information you needed? (**check ONE**)

- 92% Yes
- 8% No → if no, what additional information did you need? (**write response**) see report

27. For each of the following categories, please estimate how much you and other members of your party spent and plan to spend on this trip within **30 miles** of Devils Punch Bowl SNA. **Please round off to the nearest dollar.**

- Motel, lodge, cabin, B&B, other lodging: \$ see report
- Camping: \$ see report
- Restaurants and bars: \$ see report
- Groceries: \$ see report
- Gasoline and oil: \$ see report
- Park entry, parking, or recreation use fees: \$ see report
- Recreation and equipment (guide fees, equipment rental): \$ see report
- Souvenirs, clothing, and other miscellaneous: \$ see report

28. Are you staying away from home within 30 miles of Devils Punch Bowl SNA on this trip? (**check ONE**)

- 52% No
- 48% Yes → if yes, how many nights are you staying away from home within 30 miles of this park? M=3.44 night(s)

29. Are you: (**check ONE**) 52% Male 48% Female

30. How old are you? (**write response**) M=44.27 years old

31. Which of the following best describes you? (**check ONE**)
 95% White (Caucasian) <1% Hispanic / Latino 1% American Indian or Alaskan Native 1% Other
 1% Black / African American 2% Asian <1% Native Hawaiian or Pacific Islander

32. What language is spoken most often at your home? (**check ONE**)
 99% English 0% Spanish 0% Russian 1% Other (write response) _____

33. Where do you live? (**write responses**) City / town see report State see report Country see report

34. Which of these broad categories best describes your **current annual household income before taxes**? (**check ONE**)

5% Less than \$10,000	11% \$90,000 to \$109,999
11% \$10,000 to \$29,999	7% \$110,000 to \$129,999
13% \$30,000 to \$49,999	5% \$130,000 to \$149,999
24% \$50,000 to \$69,999	1% \$150,000 to \$169,999
16% \$70,000 to \$89,999	8% \$170,000 or more

Please tell us how we can improve Devils Punch Bowl SNA:

See Report

Thank you, your input is important! ***Please return this survey as soon as possible.***