

Recreation Use Assessment

Priest Rapids Hydroelectric Project

Prepared for:

Public Utility District No. 2 of Grant County
Ephrata, Washington

2016



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CLEMSON
PARKS, RECREATION AND
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EXECUTIVE SUMMARY

Public Utility District No. 2 of Grant County (Grant PUD) commissioned this Recreation Use Assessment for the Priest Rapids Project (Project) as part of its license requirements from the Federal Energy Regulatory Commission (FERC). This report provides an assessment of recreational users' attitudes and use of facilities and sites within the Project boundary – a 58 river mile area that includes two hydropower dams, Priest Rapids Dam and Wanapum Dam, and associated reservoirs. This report supports Grant PUD's FERC license requirements to revise and file an update to its Recreation Resource Management Plan (RRMP) and to complete Form 80 reporting, both due in 2016.

Using current and well-accepted social science techniques and technology for studying recreation, a total of 748 recreation user surveys were collected at 24 recreation sites between June 18 and September 10, 2015. These 24 sites were chosen to provide a representative selection at high and low use sites across the Project. During this same timeframe, over 60,000 observations of use levels (collected using both observers and field cameras) were made at 85 recreation amenities located at 49 recreation sites on the Project. These data serve as a strong, reliable basis for understanding and managing recreation on the Project.

Based on the above data, an annual estimate of recreation use of the Project is 346,597 Recreation Days. This consists of an estimated 168,793 daytime Recreation Days and 177,804 nighttime Recreation Days. Only about 10% of the overall use of the Project occurs on the Priest Rapids Reservoir. Further analysis indicates that the July 4th and Labor Day Holiday weekends (3 days each) account for 11.4% of the total visitor use during the peak use season. A 3-day holiday weekend use estimate consists of 7,660 daytime Recreation Days and 8,069 nighttime Recreation Days.

Survey results show that most users of the Project live locally or are from major cities in western Washington, and that the Project's direct contribution from recreation visitors alone to the local economy can be valued at over \$34,000,000. When considering how these direct expenditures are then spent again multiple times in the local economy, the overall economic impact of recreational use at the Project is even higher in terms of dollars and jobs contributed.

Recreation use of the Project reflects its role as a place predominately for water-based recreation. The most common recreational activities included swimming, visiting the beach, resting/relaxing, and boating. Survey results suggest that visitors to the Project are being provided high-quality recreation experiences. For example, visitors indicated very low levels of perceived crowding on both reservoirs and for the Project itself. Also, when asked to evaluate the quality and number of facilities on the reservoirs visitors indicated they were generally "about right." No pervasive or serious recreation-related issues were noted by visitors. The survey results suggest that the recreation facilities and their management on the Project are effective in providing high-quality recreation experiences and minimize negative recreational issues for an overwhelming majority of visitors.

Given the positive nature of the survey results, the primary recommendation is that recreation provision and management continue in its current form. Continuing a strong program of both public outreach and public input is recommended since recreation is

perhaps one of the most important ways that the general public interacts with Grant PUD.

Study results indicate shade/wind-shelter structures and enhanced maintenance of facilities (particularly bathrooms and litter) could further improve recreational experiences. At bathrooms this includes providing hand sanitizer, posting a phone number on bathroom doors to report maintenance issues, installing air fresheners, and increasing maintenance schedules. Litter is more difficult to control, but increasing maintenance schedules and providing signage to encourage self-removal of litter is recommended. Other recommendations include establishing a quick, cost-effective visitor experience monitoring protocol and using the information contained in this report to aide future recreational resource management.

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A. INTRODUCTION

Public Utility District No. 2 of Grant County (Grant PUD) commissioned this study to support requirements under Article 418 of their license, as amended on September 2012, from the Federal Energy Regulatory Commission (FERC) for the Priest Rapids Hydroelectric Project (Project) (FERC Project No. 2114). As part of its FERC license (FERC 2008), Grant PUD is required to revise and file an update to the Priest Rapids Recreation Resource Management Plan (RRMP) in 2016. This report is intended for use as one of several empirical sources of data to inform the revised RRMP. Grant PUD is also required to periodically report to FERC on recreation amenities and use levels for each amenity on Form 80. This form is completed by licensees every six years to report recreation use estimates at a hydroelectric project and the capacity utilization of each amenity type (e.g., boat launch, campgrounds, etc.).

A series of inter-related studies were conducted to assess and evaluate recreational resources and recreation use associated with the Project. This report presents the results of one of those studies: an assessment of recreational use of facilities and sites in the Project as developed through a recreation user survey administered in the summer of 2015, as well as comprehensive recreation use estimates of both land-based facilities and water-based recreation use in 2015.

As a part of its FERC license, Grant PUD is required to implement a number of substantial capital improvements to enhance recreation access and quality (see the 2015 Recreation Site and Facility Inventory conducted by Grant PUD for details; Grant PUD 2015). Many of the capital improvements were recently completed, from 2011 through 2015. Use at these improved sites had not been measured prior to this study and it may be in flux since the improvements to these newly developed sites are just becoming known by recreation users. Part of the purpose of this study is to understand recreation users' opinions of these site improvements.

This assessment data was used for Form 80 reporting in 2016. The methods applied in developing the current report have been updated to reflect substantial changes in technology and approaches for measuring use since the previous report was conducted by EDAW in 2000. Finally, the results provide a reliable baseline for future comparisons.

B. STUDY GOALS

Based on FERC reporting requirements, the goals for this study were identified by Grant PUD and this report's Principal Investigator (consultant to Grant PUD). These goals focused on recreational use at facilities and sites in the study area, and the recreational users of these sites and facilities, which included the following:

- Describe recreation use levels and patterns
- Determine the characteristics of recreational users
- Determine the attitudes of recreation users toward recreation sites, services, and related experiences in the study area.

- Gather recreation user input regarding their perception of the quality of recreation in the study areas, including crowding and recreation management
- Estimate the economic impact of recreation sites and facilities in the study area
- Estimate annual recreation use of the study area. This includes updating measurement approaches and documenting use estimate calculations.

C. STUDY AREA

The Project is located on the mid-Columbia River in central Washington and includes Wanapum and Priest Rapids reservoirs (see Figure C.1). The Project is located downstream of Wenatchee, Washington. Below the Project is the free-flowing Hanford Reach of the Columbia River. The study area includes all waters and adjacent lands and recreation facilities within the FERC Project boundary. Two privately operated recreation areas – Crescent Bar Resort and Riverstone Resort – are included in the study area. The Project boundary includes 58 river miles of the Columbia River from River Mile 395, approximately 2 miles downstream of the Priest Rapids Dam, upstream to a point approximately 0.5 mile downstream of Chelan County PUD’s Rock Island Dam at River Mile 453 (see Figure C.1).

The Wanapum Development is characterized by a mix of features, which include publicly accessible lands, steep topography, highway access, private ownership and other restricted access, agricultural activity, and park development. Wanapum Reservoir is approximately 38 miles long and runs through spectacular canyons with magnificent basalt cliffs and alluvial sand deposits. The reservoir is over 1 mile wide in some locations. Vantage is the largest town (unincorporated area) on the reservoir with a population of about 150 people. There are two residential/resort communities (much larger than Vantage) on the reservoir: Crescent Bar Resort and Sunland Estates.

Much of the undeveloped western shore of the reservoir, and portions of the eastern shoreline, are wildlife and waterfowl habitat lands managed by the Washington Department of Fish and Wildlife (WDFW). A vast majority of recreational access to and use of the reservoir is concentrated in the Interstate 90 (I-90) corridor/Vantage area and at Crescent Bar Resort and Sunland Estates. Recreation providers include Grant PUD, Washington State Parks and Recreation Commission (WSPRC), WDFW, Kittitas County, and private commercial interests such as the Riverstone Resort.

Recreation Areas

Priest Rapids Project

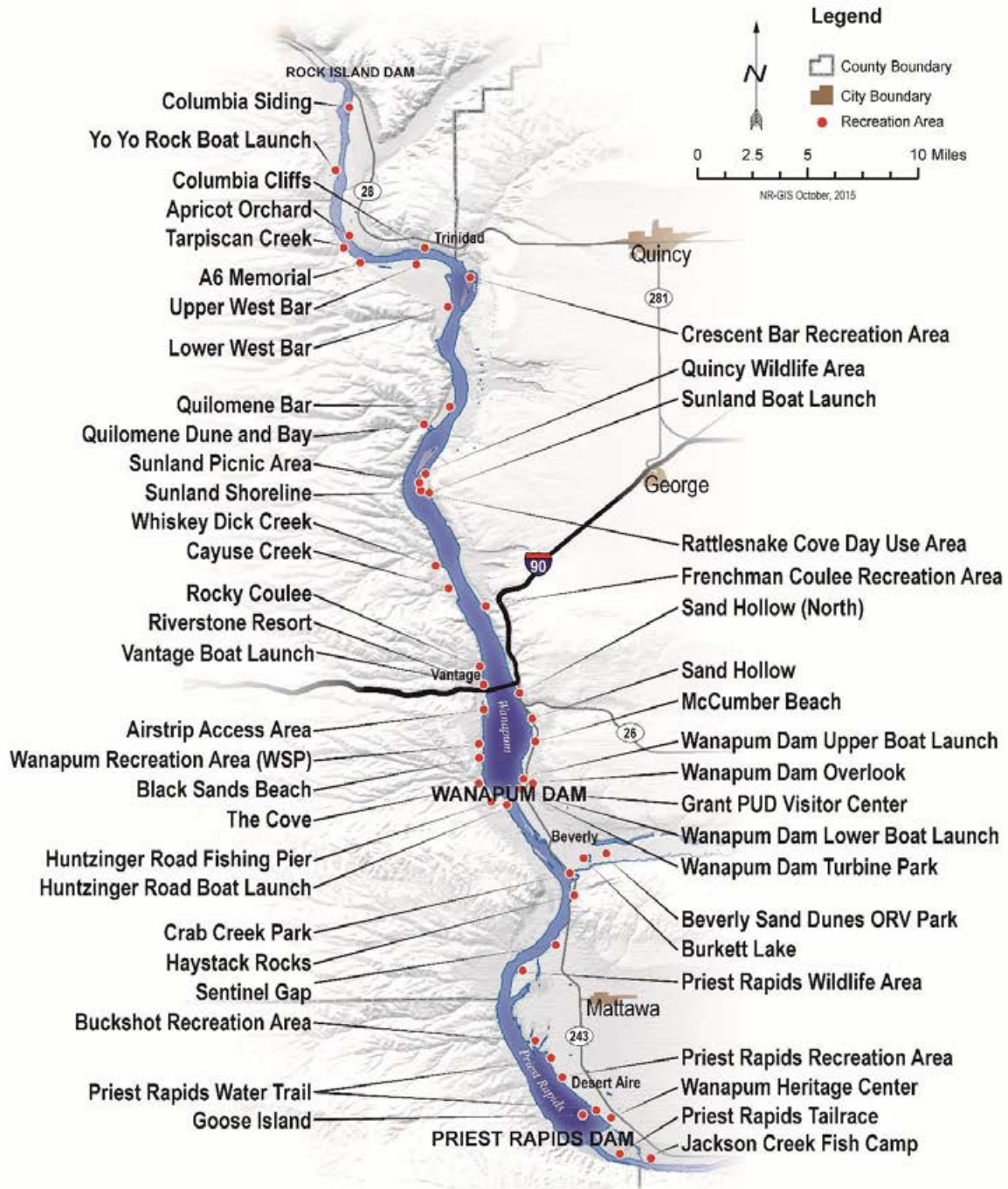


Figure C.1. Project map showing the recreation areas on Priest Rapids and Wanapum Reservoirs.

The downstream Priest Rapids Development is characteristically different from the Wanapum Development because of the shorter length of the reservoir (approximately 18 miles) and the lack of sandy beaches open to public recreation use. Similarly though, Priest Rapids Reservoir has stunning geologic features. A few miles below Wanapum Dam, the river passes through Sentinel Gap, a geologic landmark which provides a focal point of Grant PUD's Interpretation and Education panels installed at the Wanapum Dam Overlook.

Downstream of Sentinel Gap, the river valley opens up into wide slopes where private ownership and agricultural activity dominate the eastern shore. Highway 243 closely parallels the eastern shoreline in this area. Much of the western shoreline is part of the Yakima Training Center Military Reservation (YTC), with highly restricted public access.

Desert Aire is the only shoreline community of significant size adjacent to the Priest Rapids development. The Priest Rapids Development has fewer sandy beaches, fewer adjacent community developments, less publically available shoreline, and is farther from the I-90 corridor and the Gorge Amphitheatre as compared to the Wanapum Development. All of these factors likely contribute to less recreational pressure.

Locally and regionally significant recreation providers include Grant PUD, WDFW, WDNR, WSPRC, and private commercial interests at Vantage and Desert Aire.

Public recreational access to Project lands and waters is widely available and dispersed. Since its construction, the Project has provided the region with a variety of developed and dispersed recreation opportunities, including fishing, flat-water boating, camping, sightseeing, swimming, picnicking, waterskiing, personal watercraft (PWC) use, and other recreational activities. The sites and facilities at the Project have become an important centerpiece of the outdoor recreation opportunities in the central Washington region, attracting a substantial number of users. Like many other recreation facilities in the Pacific Northwest, recreation use is typically highest during the summer peak season (Memorial Day to Labor Day) and is much lower during the remainder of the year. There are small, short-term increases in off-season recreational use associated with accessing Project lands and waters during salmon fishing and waterfowl hunting seasons. As with most recreation sites, use is typically highest on weekends, and peaks on weekends associated with Memorial Day, Labor Day, and the July 4th Independence Day holiday, as well as scheduled concerts at The Gorge Amphitheater.

Recreation has changed in the Project area since the last use assessment was completed in 1999. As mentioned in Section A, substantial capital improvements, including the development of new recreation sites and facilities, have occurred in the Project within recent years. Additionally, demand for recreation resources and activities in the region has grown and changed significantly over the years, and recreation activities (both societally and regionally) have evolved or changed. For example, new forms of recreation, such as geocaching, wakeboarding, wake surfing, and stand-up paddle

boarding, have emerged in the last decade.

The study area includes a total of 130 recreation amenities located at 49 recreation sites. There are a total of 77 recreation amenities available to the public on the Wanapum Reservoir, and 53 on the Priest Rapids Reservoir. These sites and their associated amenities are detailed in the 2015 Priest Rapids Project Recreation Site and Facility Inventory (Grant PUD 2015). In addition to these recreation amenities are small dispersed undeveloped shoreline sites used predominantly for day use picnicking, boating, fishing, hunting, and sunbathing/swimming. Recreation user data were obtained at all developed recreation sites in 2015. These sites are listed in Section D.

Outside the study area is The Gorge Amphitheater located on a high bluff above Wanapum Reservoir northwest of George, Washington. The Gorge Amphitheater draws large crowds (up to 40,000 visitors) from the Central Puget Sound area and elsewhere in the Pacific Northwest. Nine concerts, over 17 days between May and September, were held in 2015. Extended weekend use in the study area related to these concerts was documented in the 1996 and 1999 surveys and was found to be substantial (DE&S 1997 and EDAW 2000). Since 1999, the Gorge Amphitheater has increased their onsite undeveloped camping opportunities.

D. STUDY METHODS

Methods for gathering data to develop this recreation use assessment include: (1) collection and analysis of instantaneous counts by automatic field cameras and observers at recreation sites, (2) collection and analysis of instantaneous counts by boat-based observers for reservoir segments, access points, and informal use areas, (3) administration of a recreation user survey at selected recreation sites and analysis of the results, and, (4) in a limited number of cases, solicitation and analysis of secondary use data from private recreation providers in the study area. Grant PUD staff was responsible for conducting all data collection activities. The Clemson University Principal Investigator (PI) was responsible for designing the data collection procedures and instruments. Also, the PI aided Grant PUD staff with starting data collection (e.g., providing survey administration training, pretesting and refining survey administration procedures in the field). During the course of field data collection, the PI provided advice and guidance, in particular with troubleshooting and/or adapting procedures to field conditions.

Dates for conducting data collections were randomly selected and designed to provide a representative assessment of recreation users. This includes a proportionate sampling of weekdays, weekend days, holiday weekends, and event weekends. These methods and sampling protocols are discussed below and summarized in Tables D.1 and D.2 below.

Instantaneous Counts of Recreation Users by Field Cameras or Observers

Assessment of the recreational activity at various sites with concentrated use was

accomplished using counts by automatic field cameras. Recreation use of both land and water-accessed sites were assessed using field cameras. All sites where observation counts were conducted by car in 1999 were selected for deployment of field cameras in 2015. In addition, observation counts by field camera were done for the first time at a number of additional sites (Table D.1).

The field cameras are the type of commercial, off-the-shelf units often used by private individuals for recording wildlife activity. These cameras are both reliable and field-tested for the purposes of automatically recording recreation use at a site. Specifically, Hallo and Brownlee (2013) successfully used field cameras for conducting counts of both people and vehicles in parking lots at Pinnacles National Park. Sunger, Teske, Nappier, and Haas (2012) used time-lapse cameras to conduct recreational use assessments of water-based activities.

Field cameras offer the advantage of allowing for much more detailed and robust data collection, since they are not reliant on an individual being present at the site. This is particularly important for this assessment because recreation use will be determined at a large number of sites and facilities distributed over a relatively large area. Photo-based data collection may also remove some of the error and subjectivity associated with use counts, particularly under high-use conditions.

The Moultrie D-555i field cameras utilized in the study allowed high resolution photos (8 MB) to be taken over a minimum of a two-week period without being downloaded. Also, the camera had a programmable time-lapse function that allowed photos to be taken at specified intervals and during specified hours. The cameras were weatherproof and designed to be easily mounted with either a security box or with a mounting bracket.

A photo point was established at each site or facility. The photo point was selected to visually capture the broadest view of the primary use areas at a particular site or facility. At larger sites or where multiple primary use locations were present at a particular site (e.g., boat launch, picnic area, swim area), additional photo points were established and multiple cameras were used. These photo points and the associated viewsheds (presented in Appendix C of this report) will be used in the future for comparative use assessment efforts.

A field camera was secured at each photo point and concealed in a tree, by ground vegetation, or by camouflage to prevent tampering, theft, or vandalism. Where appropriate, a camera security box, padlock and/or cable lock was used. With the exception of those placed on trails, cameras were programmed to capture photos every 15 minutes between 11 a.m. and 5 p.m. This time period was selected because it is recognized as the busiest time of day for recreation activity in the study area, and it is the same time period that data were collected in 1999, which maintains comparability with prior data and results. Photos at 15-minute intervals follow the procedures used by Hallo and Brownlee (2013). On trails, field cameras were set to

take pictures when motion was sensed due to the dispersed and transitory nature of use associated with this facility type.

Field cameras were deployed for data collection at each site during two 16-day periods selected between June 18 and September 6, 2015. (A few exceptions to this exist where a camera malfunctioned. These exceptions are shown in the results presented in Appendix C.) This time period was selected because it is recognized as the peak recreation season in the study area. It also roughly corresponds with the time period that data were collected in 1999. Data collection time periods for each site were randomly selected, but the selection was constrained to ensure 1) a minimum of a two weeks between the end of the first period and the beginning of the second period, 2) data collection ended no later than September 10, 2015, and 3) one data collection period began/ended on a weekend day (Saturday or Sunday) and the other period began/ended on a weekday (Monday through Friday). Sites were grouped based on their proximity to allow for efficient data collection. This resulted in the 13 data collection periods shown in Table D.2.

The data collection period selection procedure described above ensured that use levels were determined on a total of 32 days. This represents a four-fold increase in the overall data collection period as compared to the 1999 data collection. Data collection for consecutive 16-day periods also ensured that weekdays and weekend days were considered in an accurate, representative manner without the need to stratify the sample by this variable.

At the end of each data collection period the camera was removed and all photos were downloaded. The entire photo data collection process resulted in over 60,000 photos. Each photo (in digital format) was visually inspected by a trained research assistant to gather data representing an instantaneous assessment, where applicable, of the number of vehicles, trailers, powerboats, PWC, inflatable-crafts, people, picnic tables occupied, campsites occupied, boats waiting to launch, and marina boat slips occupied. All of these variables were counted by research assistants using an image analysis software tool called *Timelapse* (Greenberg and Godin 2015). This software allowed each image to be inspected in an efficient, documented, and traceable manner. *Timelapse* stored counts of variables in a database that was then used for later analysis.

A drawback to using field cameras is that they may not be appropriate in all contexts. Specifically, a camera may not be able to be mounted because of concerns regarding permission, or a camera may not be able to be positioned to photograph the primary use at a site. The latter is particularly true with privately owned sites, informal use areas, and access points. In cases such as these (including all access points and hunting areas), observer counts were conducted at the beginning and end of each relevant data collection period and during days when boat counts occurred (Table D.2). The procedure and modified recreation data forms (see Appendices E and F) described in the 2000 Recreation Use Assessment report were used for these observer-based counts.

Table D.1. Recreation sites and data collection methodologies for the 2015 Priest Rapids Project Recreation Use Assessment. An asterisk indicates that the method was applied at the site. The last column indicates the applicable data collection period.

Site Name	Amenity Type (Form 80)	Field Camera	Visitor Surveys	Boat Observations	Secondary/Existing /Interview Data & Grant PUD Institutional Knowledge	Primary Data Collection Period	Second Data Collection Period
Columbia Siding	Access Point			*	*	1	Boat
Yo Yo Rock Boat Launch	Boat Launch	*		*	*	1	Boat
A6 Memorial	Informal Use Area (Boat In)			*	*	Boat	
Tarpiscan Creek	Hunting Area			*	*	Boat	
Apricot Orchard Boat Launch	Access Point			*	*	1	Boat
Apricot Orchard Boat Launch	Hunting Area			*	*	Boat	
Columbia Cliffs	Informal Use Area (Boat In)			*	*	Boat	
Upper West Bar	Hunting Area			*	*	Boat	
Lower West Bar	Informal Use Area (Boat In)			*	*	Boat	
CBRA Off-Island	Boat Launch	*	*			2	
CBRA Off-Island	Campground		*		*	2	
CBRA Off-Island	Marina				*	2	
CBRA Off-Island (Orchards)	Access Point				*	2	Boat
CBRA On-Island	Active Recreation Area	*	*			2	
CBRA On-Island	Boat Launch	*	*			2	
CBRA On-Island	Picnic Area	*	*		*	2	
CBRA On-Island	Informal Use Area (Boat In)			*	*	Boat	
CBRA On-Island (Golf Course)	Active Recreation Area		*		*	2	
Quincy Wildlife Area	Access Point			*	*	3	Boat
Rattlesnake Cove	Picnic Area	*	*		*	3	
Rattlesnake Cove	Swim Area	*	*			3	
Sunland Boat Launch	Boat Launch	*	*			3	
Sunland shoreline	Access Point			*	*	3	Boat
Sunland Picnic Area	Picnic Area	*	*		*	3	
Quilomene Dune and Bay	Informal Use Area (Boat In)	*	*	*		4	Boat
Quilomene Dune and Bay	Dispersed Camp Area		*	*	*	4	

Table D.1. (continued) Recreation sites and data collection methodologies for the 2015 Priest Rapids Project Recreation Use Assessment. An asterisk indicates that the method was applied at the site. The last column indicates the applicable data collection period.

Site Name	Amenity Type (Form 80)	Field Camera	Visitor Surveys	Boat Observations	Secondary/Existing /Interview Data & Grant PUD Institutional Knowledge	Primary Data Collection Period	Second Data Collection Period
Quilomene Bar	Hunting Area			*	*	Boat	
Whiskey Dick Creek	Hunting Area			*	*	Boat	
Cayuse Creek	Hunting Area			*	*	Boat	
Frenchman Coulee Recreation Area	Picnic Area	*	*		*	5	
Frenchman Coulee Recreation Area	Trail	*	*			5	
Frenchman Coulee Recreation Area	Boat Launch	*	*			5	
Rocky Coulee	Boat Launch	*	*			5	
Rocky Coulee	Campground		*		*	5	
Rocky Coulee	Picnic Area	*	*		*	5	
Riverstone Resort	Access Point		*	*	*	6	Boat
Riverstone Resort	Marina		*		*	6	
Vantage Boat Launch	Boat Launch	*	*			6	
Vantage Boat Launch	Picnic Area	*	*		*	6	
Airstrip Access Area	Informal Use Area (Boat In)			*	*	Boat	
Sand Hollow	Campground		*		*	7	
Sand Hollow (both southern bays)	Informal Use Area			*	*	Boat	
Sand Hollow	Picnic Area	*	*		*	7	
Sand Hollow	Picnic Area	*	*		*	7	
Sand Hollow	Picnic Area	*	*		*	7	
Sand Hollow	Swim Area	*	*		*	7	
Sand Hollow (North)	Access Point			*	*	7	Boat
Wanapum Dam Upper Boat Launch	Boat Launch	*	*			8	
Wanapum Recreation Area (WSP)	Boat Launch	*	*		*	8	
Wanapum Recreation Area (WSP)	Picnic Area	*	*		*	8	
Wanapum Recreation Area (WSP)	Swim Area	*	*			8	
Black Sands Beach	Informal Use Area (Boat In)			*	*	Boat	

Table D.1. (continued) Recreation sites and data collection methodologies for the 2015 Priest Rapids Project Recreation Use Assessment. An asterisk indicates that the method was applied at the site. The last column indicates the applicable data collection period.

Site Name	Amenity Type (Form 80)	Field Camera	Visitor Surveys	Boat Observations	Secondary/Existing /Interview Data & Grant PUD Institutional Knowledge	Primary Data Collection Period	Second Data Collection Period
McCumber Beach	Informal Use Area (Boat In)			*	*	Boat	
Wanapum Dam Lower Boat Launch	Boat Launch	*	*			8	
Wanapum Dam Overlook	Overlook Vista	*	*			9	
Wanapum Dam Overlook	Picnic Area	*	*		*	9	
Wanapum Turbine Park	Picnic Area	*	*		*	9	
Huntzinger Road Boat Launch	Boat Launch	*	*			10	
Huntzinger Road Fishing Access Site	Reservoir Fishing Amenity	*	*			10	
The Cove	Picnic Area	*	*		*	10	
The Cove	Boat Launch	*	*		*	10	
Crab Creek Park	Access Point			*	*	11	Boat
Burkett Lake Recreation Area	Access Point				*	11	Boat
Burkett Lake Recreation Area	Trail	*	*			11	
Burkett Lake Recreation Area	Overlook Vista	*	*			11	
Beverly Sand Dunes ORV Park	Other (ORV Park)		*		*	11	
Beverly Sand Dunes ORV Park	Dispersed Camp Area		*		*	11	
Haystack Rocks	Access Point			*	*	11	Boat
Sentinel Gap	Access Point			*	*	11	Boat
Priest Rapids Wildlife Area	Hunting Area			*	*	Boat	
Buckshot Recreation Area	Boat Launch	*	*			11	
Buckshot Recreation Area	Hunting Area					11	
PRRA	Campground		*		*	13	
PRRA	Picnic Area	*	*		*	13	
PRRA	Swim Area	*	*			13	
PRRA	Trail	*	*			13	
PRRA (North Picnic Area)	Picnic Area	*	*		*	13	
Priest Rapids Recreation Area (PRRA)	Boat Launch	*	*			13	

Table D.1. (continued) Recreation sites and data collection methodologies for the 2015 Priest Rapids Project Recreation Use Assessment. An asterisk indicates that the method was applied at the site. The last column indicates the applicable data collection period.

Site Name	Amenity Type (Form 80)	Field Camera	Visitor Surveys	Boat Observations	Secondary/Existing /Interview Data & Grant PUD Institutional Knowledge	Primary Data Collection Period	Second Data Collection Period
Priest Rapids Water Trail (N. Trailhead)	Boat Launch	*	*		*	13	Boat
Priest Rapids Water Trail (PRRA Swim)	Boat Launch	*	*		*	13	Boat
Priest Rapids Water Trail (S. Trailhead)	Boat Launch	*	*		*	13	Boat
Goose Island	Hunting Area			*	*	Boat	
Jackson Creek Fish Camp	Campground		*		*	12	
Jackson Creek Fish Camp	Tailwater Fishing Amenity	*	*			12	
Priest Rapids Tailrace	Access Point				*	12	
Turbine Park Visitor Center	Not open/still under construction at the time of data collection						
Wanapum Heritage Center	Not open/still under construction at the time of data collection						

Table D.2. Data collection periods for the 2015 Recreation Use Assessment

	Columbia Siding, Yo Yo Rock, Apricot Orchard Boat Launch, Columbia Cliffs	Crescent Bar	Quincy WLA, Sunland, Rattlesnake Cove	Quilomene Dune	Frenchman Coulee Rocky Coulee	Vantage Riverstone	Sand Hollow Sand Hollow North	Wanapum Dam Upper, Wanapum State Park, Wanapum Lower Boat Launch	Wanapum Dam Overlook Wanapum Turbine Park	Huntzinger BL and Fishing Pier, The Cove	Crab Creek Park, Burkett Lake, Haystack Rocks, Buckshot, Beverly ORV	Jackson Creek Fish Camp PR Tailrace	PRRA PR Water Trail	Wanapum Reservoir & Priest Rapids Reservoir
Data Collection Period	1	2	3	4	5	6	7	8	9	10	11	12	13	
18-Jun					S									
19-Jun					C									
20-Jun					C	S				S				
21-Jun					C	C				C				
22-Jun					C	C				C				
23-Jun					C	C				C				Boat
24-Jun					C	C			S	C				
25-Jun					C	C	S		C	C				
26-Jun					C	C	C		C	C				
27-Jun	C				C	C	C		C	C	S			
28-Jun	C				C	C	C		C	C	C			
29-Jun	C	C			C	C	C		C	C	C			
30-Jun	C	C			C	C	C		C	C	C			
1-Jul	C	C			C	C	C		C	C	C			
2-Jul	C	S			C	C	C		C	C	C			
3-Jul	C	C			S	C	C		C	C	C			
4-Jul	C	C		S		C	C		C	C	C	S		
5-Jul	C	C		C		S	C		C	S	C	C		
6-Jul	C	C		C			C		C		C	C		
7-Jul	C	C		C			C		C		C	C		
8-Jul	C	C		C			C		C		C	C		
9-Jul	C	C		C			C		S		C	C		
10-Jul	C	C		C			S				C	C		
11-Jul	C	C	S	C				S			C	C		
12-Jul	C	C	C	C				C			S	C		
13-Jul		C	C	C				C				C		
14-Jul		S	C	C				C				C		
15-Jul			C	C				C				C	S	
16-Jul			C	C				C				C	C	
17-Jul			C	C				C				C	C	
18-Jul			C	C				C				C	C	Boat

Table D.2. (continued) Data collection periods for the 2015 Recreation Use Assessment

	Columbia Siding, Yo Yo Rock, Apricot Orchard Boat Launch, Columbia Cliffs	Crescent Bar	Quincy WLA, Sunland, Rattlesnake Cove	Quilomene Dune	Frenchman Coulee Rocky Coulee	Vantage Riverstone	Sand Hollow Sand Hollow North	Wanapum Dam Upper, Wanapum State Park, Wanapum Lower Boat Launch	Wanapum Dam Overlook Wanapum Turbine Park	Huntzinger BL and Fishing Pier, The Cove	Crab Creek Park, Burkett Lake, Haystack Rocks, Buckshot, Beverly ORV	Jackson Creek Fish Camp PR Trailrace	PRRA PR Water Trail	Wanapum Reservoir & Priest Rapids Reservoir
19-Jul			C	S				C				S	C	
20-Jul			C					C		S			C	
21-Jul			C					C		C			C	
22-Jul			C			S		C		C			C	
23-Jul			C			C		C		C			C	
24-Jul			C			C		C		C			C	
25-Jul			C		S	C		C		C			C	
26-Jul			S		C	C		S		C			C	
27-Jul	C				C	C				C			C	
28-Jul	C				C	C				C			S	
29-Jul	C				C	C				C			C	
30-Jul	C				C	C				C			C	
31-Jul	C				C	C				C				
1-Aug	C	S			C	C				C				
2-Aug	C	C			C	C				C				
3-Aug	C	C			C	C				C				
4-Aug	C	C			C	C				S				
5-Aug	C	C		S	C	C								
6-Aug	C	C		C	C	S								
7-Aug	C	C		C	C									
8-Aug	C	C		C	C									Boat
9-Aug	C	C		C	S									
10-Aug	C	C	S	C										
11-Aug	C	C	C	C				S						
12-Aug		C	C	C				C			S			
13-Aug		C	C	C				C			C			
14-Aug		C	C	C				C			C			
15-Aug		C	C	C				C		Fishing Pier	C			
16-Aug		S	C	C				C		C	C			
17-Aug			C	C	French Picnic & BL			C		C	C	S		
18-Aug			C	S	C			C		C	C	C		
19-Aug			C	C	C			C		C	C	C		

Table D.2. (continued) Data collection periods for the 2015 Recreation Use Assessment

	Columbia Siding, Yo Yo Rock, Apricot Orchard Boat Launch, Columbia Cliffs	Crescent Bar	Quincy WLA, Sunland, Rattlesnake Cove	Quilomene Dune	Frenchman Coulee Rocky Coulee	Vantage Riverstone	Sand Hollow Sand Hollow North	Wanapum Dam Upper, Wanapum State Park, Wanapum Lower Boat Launch	Wanapum Dam Overlook Wanapum Turbine Park	Huntzinger BL and Fishing Pier, The Cove	Crab Creek Park, Burkett Lake, Haystack Rocks, Buckshot, Beverly ORV	Jackson Creek Fish Camp PR Trailrace	PRRA PR Water Trail	Wanapum Reservoir & Priest Rapids Reservoir
20-Aug			C	C	C			C		C	C	C		
21-Aug			C		C			C		C	C	C		
22-Aug			C		C		S	C	S	C	C	C	S	
23-Aug			C		C		C	C	C	C	C	C	C	Boat
24-Aug			C		C		C	S	C	C	C	C	C	
25-Aug			S		C		C	C	C	C	C	C	C	
26-Aug					C		C	C	C	C	C	C	C	
27-Aug					C		C		C	C	S	C	C	
28-Aug					C		C		C	C		C	C	
29-Aug					C		ESD		C	C		ESD	C	
30-Aug					C		C		ESD	Fishing Pier		C	ESD	
31-Aug					C		C		C			C	C	
1-Sep					French Picnic & BL		C		C			S	C	
2-Sep							C		C				C	
3-Sep							C		C				C	
4-Sep							C		C				C	
5-Sep							C		C				S	
6-Sep							S		S				C	

Table notes: Shaded dates represent weekends (Saturday and Sunday), unshaded dates represent weekdays. Two places are specified within the table where additional data were collected because of adaptations to field conditions.

S = Field camera setup/takedown and data collection, visitor survey data collection

C = Field camera data collection

ESD = Extra survey day

Boat = Boat-based observation counts

Instantaneous Counts by Boat-based Observers

Data on dispersed recreation users were obtained by boat-based observers. Dispersed users include both boaters on the water and shoreline users at undeveloped sites. Boat-based observers visited and visually inspected (from the water) all informal use areas and access points.

Boat-based observer counts consisted of researchers traveling by boat the entire length of each reservoir and counting (with the aid of binoculars) the number and location of all visible recreation users and boats and the type of watercraft. Boat counts usually began at approximately 10 a.m. and lasted into the early evening. This time period was selected as it was recognized as the busiest time of day for recreational activity on the water. Boat counts were made on four separate days, one weekday and three weekend days (Table D.2). Days were randomly selected from the time period between June 18 and September 10, 2015, but the selection was constrained to ensure a minimum of a week between dates selected. Two researchers and a boat driver traveled together to conduct these boat counts due to the high use numbers during the peak season. Appendices E and F show the boat-based observer counting forms used.

Consistent with Grant PUD's original Recreation Resource Management Plan (RRMP), seven reservoir segments were maintained and divided logically by recreation experience area and/or significant geographical distinctions.

Recreation User Survey

A recreation user survey was administered at several of the recreation facilities and sites (see Table D.1). Most of these sites were chosen because they replicate the locations where surveys were conducted in 1999. This allows for more comparability with prior data and results. Also, additional sites were surveyed for the first time because substantial changes were made to the sites since 1999 and use had increased, or improvements will occur in the near future and Grant PUD seeks user input on those changes.

This survey consisted of 18 questions (Appendix D). Several of the questions asked recreation users about their trip to the study area and what types of activities they had participated in during their visit. Several questions assessed perceived and expected crowding in the study area. These included questions intended to develop standards for the acceptable level of boating use on the reservoir, use at specific recreation sites, and for boat launch waiting times. Questions establishing crowding standards were based on a normative approach (Manning 2007). Specifically, these questions use well-tested wording and practices (i.e., photo displays) for development of standards (Manning 2007, Manning et al. 2010). Other questions include topics of accommodation types used, expenditures on their trip, impacts of weather, the quality and number of recreation developments and their management. Lastly, survey questions were asked about potential issues related to a recreation experience. These issues included parking, shoreline or recreational access, toilet availability, information availability, unsafe or disruptive behaviors by others, and the maintenance/condition of facilities.

Recreation users at the sites sampled (Table D.1) were asked to complete the survey. Surveyed groups were selected using a systematic sampling protocol with a random starting point. In this, a researcher positioned him or herself near a primary exit or parking location and asked the first available group to participate in the survey. One adult member from each visitor group (selected using the ‘most recent birthday’) was asked to complete the survey. If the individual or the entire group declined the next available individual or group was asked to complete a survey. Survey data were collected throughout the entire sampling day (described below). Where multiple survey locations were present at a site during a data collection period – such as boat ramps, campgrounds, and day use areas – the surveyors’ time for data collection was equally divided at each location. The proximity of these locations at a recreation site helped facilitate this coverage. This sampling technique ensures the data are representative and in relative proportion to the use levels at each site.

All surveys were conducted onsite and were self-administered, although a trained surveyor was available for assistance or to answer questions. Surveys took place on both the first day and last day of each data collection period at each site (Table D.2). This resulted in survey sampling on a total of 4 days at each site, 2 weekdays and 2 weekend days. Survey data collection began at 11 a.m. and ended at 5 p.m. This time period was selected for two reasons: 1) because it is recognized as the busiest time of day for recreation in the study area, and 2) it is the same time period that data were collected in 1999, and will therefore maintain comparability with prior data and results. Additional survey data collection was done on the Labor Day holiday (at sites indicated in Table D.2) to ensure that this time period was included in the results.

Estimation of Annual Recreation Days

Through the use of the data obtained using the aforementioned methods, it was possible to estimate recreation use at recreation sites in the study area. Use was estimated based on the concept of a ‘Recreation Day’, which is defined by FERC as “each visit by a person to a development for recreation purposes during any portion of a 24-hour period.”

Use estimates for each recreation site in the study area were developed predominantly using the empirical data collected as described in Section D. Secondary data, logical relationships, and assumptions (where necessary) supplemented empirical data. With any use estimate, assumptions are inherent and calculations are idiosyncratic – formulated around site-specific assumptions, available data, logic, and the context of each site. The potential variability in use estimate calculations underscores the need for describing in detail how use estimates were determined at each site. By doing this, future use estimates can be more directly compared to current or past use estimates.

Section E of this report provides detailed use estimate data. Also, the calculation of the number of Recreation Days at each site – including the data, assumptions, logic, and contextual factors used – are detailed.

E. RESULTS

Based on the methods detailed above, 748 surveys were completed at 24 recreation sites between June 18 and September 10, 2015. This number of visitor surveys produces results that are accurate (at the Project-level) to within 3.6% (with a confidence level of 95%). Also, over 60,000 unique observations were made to count recreation users at recreation sites.

The survey results in this section are shown in frequency tables associated with questions asked in the survey. Where appropriate, measures of central tendency (i.e., mean, median, maximum, minimum) and dispersion (i.e., standard deviation) are presented. In the tables below the standard deviation and sample size are represented by SD and N, respectively. Results are presented based on logical topic groupings, not on the order that they appeared in the survey. Also, some question items are reordered to show results in a more logical sequence of decreasing mean responses. Survey results are presented in this section, with a few noted exceptions, at both the Project-level and the Reservoir-level. Site and management unit level results may be found in appendices A and B, respectively.

The total use counts of vehicles and/or people from the observations are presented for each site in this section. These counts serve as the starting, empirical basis for Project-level use estimates detailed in this section. Counts for other recorded variables (e.g., paddlecraft, trailers) and details about the daily and weekly timing of counts are presented in Appendix C.

Survey Sample Size and Locations

Table E.1 Number of survey respondents at each reservoir

	Frequency	Percent
Priest Rapids Reservoir	92	12.3%
Wanapum Reservoir	656	87.7%
Total	748	100.0%

*Note: The difference in survey numbers per reservoir are a reflection of use levels at each reservoir, not the level of effort in collecting survey data.

Table E.2 Number of respondents at each sampling location

	Frequency	Percent
Beverly Sand Dunes ORV Park	5	0.7
Buckshot Recreation Area	4	0.5
Burkett Lake Recreation Area	4	0.5
CBRA	179	23.9
Frenchman Coulee Recreation Area	36	4.8
Huntzinger Road Boat Launch	6	0.8
Huntzinger Road Fishing Access Site	3	0.4
Jackson Creek Fish Camp	5	0.7
PRRA	65	8.7
Quilomene Dune & Bay	111	14.8
Rattlesnake Cove	11	1.5
Riverstone Resort	12	1.6
Rocky Coulee	41	5.5
Sand Hollow	36	4.8
Sunland Boat Launch	24	3.2
Sunland Picnic Area	8	1.1
The Cove	6	0.8
Vantage Boat Launch	76	10.2
Wanapum Dam Lower Boat Launch	25	3.3
Wanapum Dam Overlook	19	2.5
Wanapum Dam Upper Boat Launch	7	0.9
Wanapum Recreation Area (WSP)	57	7.6
Wanapum Turbine Park	8	1.1
Total	748	100

Visitor Demographics

Project-level responses to the question “How many people are in your vehicle today, including yourself?” (Mark all that apply)”

Table E.3 Number of people in respondent’s vehicle – Project-level

Min	Max	Mean	SD
1	25	3.80	2.73

Reservoir-level responses to the question “How many people are in your vehicle today, including yourself?”

Table E.4 Number of people in respondent’s vehicle – Reservoir-level

	Min	Max	Mean	SD
Priest Rapids Reservoir	1	15	3.4	2.5
Wanapum Reservoir	1	25	3.8	2.7

Project-level responses to the question “What is your zip code?” (Note: Reservoir-level responses not reported for zip codes). A GIS analysis was used to determine which Washington-based county each zip code lies in based on the proportion of the zip code within the county boundary. If a zip code straddles a county boundary the county was assigned to the largest portion of the zip code. Additionally, a total of 40 respondents reported zip codes from the states of WI, OR, NM, NC, MT, MN, MI, KS, IL, ID, FL, CO, CA, and AK. One respondent reported being from Germany.

Table E.5 Home county of all Washington-based survey respondents (derived from zip code data) – Project-level.

County	Frequency	Percentage
King	153	23.1%
Grant	97	14.7%
Pierce	97	14.7%
Snohomish	71	10.7%
Yakima	69	10.4%
Kittitas	52	7.9%
Franklin	21	3.2%
Chelan	14	2.1%
Whatcom	14	2.1%
Douglas	13	2.0%
Spokane	13	2.0%
Thurston	13	2.0%
Benton	9	1.4%
Skagit	8	1.2%
Adams	6	0.9%
Clallam	4	0.6%
Clark	4	0.6%
Lewis	4	0.6%

Visitor Trip Characteristics

Project-level response to the question “How much time will you spend on your current trip?”

Table E.6 Time spent in hours on current trip – Project-level

<1 hr	1-4 hrs.	5-8 hrs.	>8 hrs.	Total	N	Median	Mean	S.D.
4.2%	55.2%	31.8%	8.9%	100%	359	4	5.9	9.9

Table E.7 Time spent in days on current trip – Project-level

1-2 days	3-4 days	5-7 days	> 1 Week	Total	N	Median	Mean	S.D
25.1%	41.5%	21.2%	12.2%	100%	378	3	7.03	22.7

Reservoir-level responses to the question “How much time will you spend on your current trip?”

Table E.8 Time spent in hours on current trip – Reservoir-level

	< 1 hr	1-4 hrs	5-8hrs	> 8 hrs	Total	N
Priest Rapids Reservoir	6.8%	52.3%	38.6%	2.3%	100%	44
Wanapum Reservoir	4.0%	58.7%	32.6%	4.7%	100%	298

Table E.9 Time spent in days on current trip – Reservoir-level

	1-2days	3-4days	5-7days	>1 week	Total	N
Priest Rapids Reservoir	35.4%	22.9%	27.1%	14.6%	100%	48
Wanapum Reservoir	25.8%	43.5%	19.4%	11.3%	100%	345

Project-level responses to the question “If your current trip extends into two or more days, what type of overnight accommodations did you use on your trip?” (*check all that apply*)

Table E.10 Project-level type of accommodation used – Project-level

	Percentage Checked
Campground (RV or tent)	42.7%
Location: <i>Refer to site-level results tables in the appendix</i>	
Rented cabin/condo/home/motel/hotel	19.4%
Location: <i>Refer to site-level results tables in the appendix</i>	
Your own home/property	33.9%
Other (<i>Please specify</i>):	8.9%
Other Text: <i>Refer to site-level results tables in the appendix</i>	

Reservoir-level responses to the questions “If your current trip extends into two or more days, what type of overnight accommodations did you use on your trip?” (*check all that apply*)

Table E.11 Type of accommodation used for visitors to Priest Rapids Reservoir – Reservoir-level

	Percentage Checked
Campground (RV or tent)	35.4%
Location: <i>Refer to site-level results tables in the appendix</i>	
Rented cabin/condo/home/motel/hotel	6.2%
Location: <i>Refer to site-level results tables in the appendix</i>	
Your own home/property	49.2%
Other (<i>Please specify</i>):	12.3%
Other Text: <i>Refer to site-level results tables in the appendix</i>	

Table E.12 Type of accommodation used for visitors to Wanapum Reservoir – Reservoir-level

	Percentage Checked
Campground (RV or tent)	43.8%
Location: <i>Refer to site-level results tables in the appendix</i>	
Rented cabin/condo/home/motel/hotel	21.4%
Location: <i>Refer to site-level results tables in the appendix</i>	
Your own home/property	31.6%
Other (<i>Please specify</i>):	8.4%
Other Text: <i>Refer to site-level results tables in the appendix</i>	

Project-level response to the question “Please estimate how much money you and your party will spend TODAY while on this trip (e.g., fuel, lodging, restaurants, groceries, admissions, fees, outdoor gear, etc.)”

Table E.13 Estimated expenditures on the day of visit – Project-level

Current day Trip Expenditure (\$)											
	0	1-50	51-100	101-150	151-200	201-300	301-500	>500	Median	Mean	SD
	5.5%	27.0%	22.9%	7.6%	11.1%	9.3%	9.4%	7.3%	100	291.3	1640.6

Reservoir-level responses to the question “Please estimate how much money you and your party will spend TODAY while on this trip (e.g., fuel, lodging, restaurants, groceries, admissions, fees, outdoor gear, etc.)”

Table E.14 Estimated expenditures on the day of visit for visitors to each reservoir – Reservoir-level

Current day Trip Expenditure (\$)											
	0	1-50	51-100	101-150	151-200	201-300	301-500	>500	Median	Mean	SD
Priest Rapids Reservoir	11.3%	27.5%	28.8%	3.8%	11.3%	8.8%	8.8%	-	100	127.8	128.8
Wanapum Reservoir	4.7%	26.9%	22.1%	8.1%	11.1%	9.3%	9.5%	8.3%	100	313.9	1748.6

Recreational Use by Activity

Project-level responses to the question “Please indicate which of the following activities you are participating in on this trip (mark all that apply).”

Table E.15 Activities participated in by respondents – Project-level

	Yes (% of sample)
Swimming/visiting the beach	67.6%
Resting/relaxing	62.9%
Boating	41.9%
Picnicking	25.5%
Camping	25.4%
Waterskiing/tubing/wakeboarding	24.8%
Wildlife Viewing	23.0%
Photography	19.0%
Riding jet skis/wave runners	13.5%
Golf	13.0%
Fishing	12.9%
Attending a concert	12.3%
Hiking	10.9%
Canoeing/kayaking/paddle boarding	7.7%
Visiting a dam	4.0%
Other	12.4%
<i>Other Text: Refer to site-level survey results in the appendix</i>	

Reservoir-level responses to the question “Please indicate which of the following activities you are participating in on this trip.”

Table E.16 Activities participated in by respondents on the Priest Rapids Reservoir – Reservoir-level

	Yes (% of sample)
Resting/relaxing	52.8%
Boating	44.4%
Swimming/visiting the beach	34.4%
Fishing	28.1%
Waterskiing/tubing/wakeboarding	22.5%
Golf	18.0%
Camping	16.9%
Wildlife Viewing	16.7%
Picnicking	14.6%
Photography	12.2%
Canoeing/kayaking/paddle boarding	10.1%
Riding jet skis/wave runners	8.9%
Hiking	7.9%
Visiting a dam	6.7%
Attending a concert	2.2%
Other	16.9%
<i>Other Text- Refer to site-level survey results in the appendix</i>	

**Table E.17 Activities participated in by respondents on the Wanapum Reservoir
– Reservoir-level**

	Yes (% of sample)
Swimming/visiting the beach	72.1%
Resting/relaxing	64.3%
Boating	41.5%
Picnicking	27.0%
Camping	26.5%
Waterskiing/tubing/wakeboarding	25.2%
Wildlife Viewing	23.9%
Photography	19.9%
Riding jet skis/wave runners	14.1%
Attending a concert	13.6%
Golf	12.3%
Hiking	11.3%
Fishing	10.9%
Canoeing/kayaking/paddle boarding	7.4%
Visiting a dam	3.7%
Other	11.8%
<i>Other Text- Refer to site-level survey results in the appendix</i>	

Table E.18 Primary activity on this trip – Project-level

	% of sample
Boating	24.7%
Resting/relaxing	16.4%
Swimming/visiting the beach	14.8%
Attending a concert	10.2%
Camping	8.7%
Fishing	6.6%
Waterskiing/tubing/wakeboarding	4.4%
Golf	4.1%
Hiking	3.0%
Riding jet skis/wave runners	2.5%
Picnicking	1.6%
Photography	1.1%
Wildlife Viewing	0.8%
Canoeing/kayaking/paddle boarding	0.8%
Visiting a dam	0.3%

Visitor Perceptions of Crowding and Crowding Standards

Project-level response to the question “Help us understand crowding issues by answering the following questions. (Mark one response for each item)”

Table E.19 Crowding issues – Project-level

	Not at all Crowded		Slightly Crowded		Moderately Crowded		Extremely Crowded		DK/NA	Mean	SD	
How crowded did you feel today?	58.2%	14.9%	6.7%	8.9%	1.7%	6.2%	1.7%	0.9%	0.7%	1.1%	2.1	1.8
How crowded did you <u>expect</u> to feel today?	28.8%	11.3%	8.6%	17.7%	6.3%	15.9%	4.2%	4.2%	3.0%	2.8%	3.6	2.3

Note: Mean based on 9 categories with 1= Not at all crowded, 9= Extremely crowded

Reservoir-level responses to the question “Help us understand crowding issues by answering the following questions. (Mark one response for each item)”

Table E.20 Priest Rapids Reservoir crowding issues – Reservoir-level

	Not at all Crowded		Slightly Crowded		Moderately Crowded		Extremely Crowded		DK/NA	Mean	SD	
How crowded did you feel today?	80.0%	11.8%	3.5%	3.5%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	1.4	0.9
How crowded did you <u>expect</u> to feel today?	37.8%	12.2%	12.2%	14.6%	4.9%	7.3%	3.7%	4.9%	2.4%	1.2%	3.1	2.3

Note: Mean based on 9 categories with 1= Not at all crowded, 9= Extremely crowded

Table E.21 Wanapum Reservoir crowding issues – Reservoir-level

	Not at all Crowded		Slightly Crowded		Moderately Crowded		Extremely Crowded		DK/NA	Mean	SD	
How crowded did you feel today?	55.2%	15.4%	7.2%	9.6%	2.0%	6.9%	2.0%	1.0%	0.8%	1.3%	2.3	1.9
How crowded did you <u>expect</u> to feel today?	27.5%	11.2%	8.1%	18.2%	6.5%	17.1%	4.2%	4.1%	3.1%	3.0%	3.7	2.3

Note: Mean based on 9 categories with 1= Not at all crowded, 9= Extremely crowded

Site-level responses to the question “If you used the area shown in photo A, what is the maximum number of people you think could use the recreation site pictured at any one time without you feeling too crowded? “

Note: “Photo A” refers to a photo that corresponds with the use counting photo viewshed shown for each site in Appendix C. Also, because this question is designed and worded to develop site-specific crowding standards no Project or Reservoir-level results are reported. An example photo of Sunland Picnic Area is shown below.



Figure E.1. Example of a “Photo A” referenced in the survey, showing Sunland Picnic Area

Table E.22 Maximum number of people that could use the recreation site – site-level

Site	Number of people						Min	Max	Mean	SD	N
	≤ 20	21-40	41-60	61-80	81-100	>100					
Beverly Sand Dunes ORV Park	40%	20%	0%	0%	40%	0%	6	100	51.2	45.4	5
Buckshot Recreation Area	50%	0%	0%	0%	0%	50%	6	1000	503.0	702.9	2
Burkett Lake Recreation Area	100%	0%	0%	0%	0%	0%	3	8	5.7	2.5	3
CBRA	29%	12%	7%	7%	15%	30%	1	1000	128.2	186.7	136
Frenchman Coulee Recreation Area	52%	26%	13%	0%	0%	10%	5	500	51.4	95.2	31
Huntzinger Road Boat Launch	33%	17%	33%	0%	17%	0%	15	100	44.2	31.8	6
Huntzinger Road Fishing Access Site	100%	0%	0%	0%	0%	0%	2	8	5.3	3.1	3
Jackson Creek Fish Camp	100%	0%	0%	0%	0%	0%	4	20	14.7	9.2	3
PRRA	54%	10%	17%	4%	8%	6%	1	300	41.3	56.5	48
Quilomene Dune & Bay	2%	1%	7%	1%	16%	73%	3	8000	637.0	1115.6	91
Rattlesnake Cove	56%	22%	11%	0%	0%	11%	5	300	55.2	92.8	9
Riverstone Resort	10%	10%	30%	0%	0%	50%	20	500	170.2	183.9	10
Rocky Coulee	41%	24%	24%	7%	3%	0%	1	100	35.4	23.5	29
Sand Hollow	43%	23%	3%	3%	17%	10%	4	400	59.8	81.7	30
Sunland Boat Launch	21%	32%	32%	5%	11%	0%	4	100	43.6	26.5	19
Sunland Picnic Area	14%	0%	29%	14%	14%	29%	13	200	98.3	74.4	7
The Cove	17%	33%	17%	0%	17%	17%	20	200	75.8	66.8	6
Vantage Boat Launch	14%	10%	24%	17%	22%	12%	2	300	73.4	53.6	58
Wanapum Dam Lower Boat Launch	31%	15%	46%	8%	0%	0%	3	70	37.5	22.0	13
Wanapum Dam Overlook	67%	25%	0%	0%	0%	8%	6	260	37.3	70.8	12
Wanapum Dam Upper Boat Launch	100%	0%	0%	0%	0%	0%	1	20	11.0	9.5	3
Wanapum Recreation Area (WSP)	12%	13%	17%	12%	17%	29%	3	800	116.3	134.8	52
Wanapum Turbine Park	14%	29%	57%	0%	0%	0%	20	50	41.4	12.1	7

Site-level responses to the question “What is the maximum number of people that you saw actually using the recreation site pictured at any one time during your visit today?”

Note: “The recreation site pictured” refers a photo that corresponds with the use counting photo viewshed shown for each site in Appendix C. Also, because this question is designed and worded to develop site-specific crowding standards no Project or Reservoir-level results are reported.

Table E.23 Maximum number of people that you saw actually using the recreation site – site-level

Site	Number of people							DK	Min	Max	Mean	SD	N
	0	1≤20	21-40	41-60	61-80	81-100	>100						
Beverly Sand Dunes ORV Park	33%	67%	0%	0%	0%	0%	0%	0%	0	10	4.3	5.1	3
Buckshot Recreation Area	0%	100%	0%	0%	0%	0%	0%	0%	3	3	3.0		1
Burkett Lake Recreation Area	33%	67%	0%	0%	0%	0%	0%	0%	0	4	2.3	2.1	3
CBRA	1%	39%	16%	10%	4%	11%	18%	17.9%	0	1500	82.4	155.4	125
Frenchman Coulee Recreation Area	6%	94%	0%	0%	0%	0%	0%	8.6%	0	20	6.2	4.5	31
Huntzinger Road Boat Launch	20%	80%	0%	0%	0%	0%	0%	0%	0	8	4.60	2.966	5
Huntzinger Road Fishing Access Site	50%	50%	0%	0%	0%	0%	0%	0%	0	4	2.00	2.828	2
Jackson Creek Fish Camp	0%	100%	0%	0%	0%	0%	0%	40.0%	1	1	1.0	0.0	2
PRRA	8%	75%	15%	2%	0%	0%	0%	7.1%	0	50	11.4	12.1	48
Quilomene Dune & Bay	0%	8%	8%	14%	7%	17%	45%	13.5%	10	3000	266.9	433.5	86
Rattlesnake Cove	0%	78%	11%	11%	0%	0%	0%	12.5%	4	60	16.2	18.3	9
Riverstone Resort	0%	89%	0%	11%	0%	0%	0%	9.1%	3	50	15.4	14.5	9
Rocky Coulee	19%	81%	0%	0%	0%	0%	0%	11.1%	0	15	4.8	4.3	27
Sand Hollow	7%	70%	10%	10%	0%	0%	3%	6.3%	0	500	31.5	89.6	30
Sunland Boat Launch	0%	90%	5%	0%	5%	0%	0%	13.3%	2	75	13.3	16.1	20
Sunland Picnic Area	13%	63%	13%	13%	0%	0%	0%	0%	0	50	18.9	17.7	8
The Cove	0%	100%	0%	0%	0%	0%	0%	0%	1	2	1.5	0.5	6
Vantage Boat Launch	2%	82%	5%	7%	2%	0%	2%	7.8%	0	200	18.0	28.7	57
Wanapum Dam Lower Boat Launch	0%	92%	8%	0%	0%	0%	0%	7.7%	2	30	8.2	7.9	12
Wanapum Dam Overlook	10%	90%	0%	0%	0%	0%	0%	12.5%	0	13	5.4	4.8	10
Wanapum Dam Upper Boat Launch	33%	67%	0%	0%	0%	0%	0%	25.0%	0	8	4.0	4.0	3
Wanapum Recreation Area (WSP)	2%	47%	16%	9%	2%	7%	18%	18.2%	0	250	52.73	61.091	45
Wanapum Turbine Park	57%	43%	0%	0%	0%	0%	0%	0%	0	8	1.9	2.968	7

Project-level responses to the question “Did you have to wait to use a boat launch today?”

Table E.24 Response on having to wait to use boat launch (%) – Project-level

	Yes	No	N
% response	15.8%	84.2%	247

Reservoir-level responses to the question “Did you have to wait to use a boat launch today?”

Table E.25 Response on having to wait to use boat launch (%) for each reservoir – Reservoir-level

	Yes	No	N
Priest Rapids Reservoir	3.2%	96.8%	31
Wanapum Reservoir	17.6%	82.4%	216

Project-level responses to the question “If you waited, how long did you wait to use a boat launch today?”

Table E.26 Current conditions on waiting times to use boat launch on the Project – Project-level

Wait Time (in minutes)									
1	5	10	15	16	20	Min	Max	Mean	SD
2.5%	35.0%	47.5%	5.0%	2.5%	7.5%	1	20	6.7	7.8

Note: Mean waiting times for all people who reported launching a boat was 1.4 minutes. This accounts for the large percentage of people who reported not having to wait to launch a boat.

Reservoir-level responses to the question “How long did you wait to use a boat launch today?”

Table E.27 Current conditions on waiting times to use boat launch on each reservoir – Reservoir level

Wait Time (in minutes)											
	1	5	10	15	16	20	Min	Max	Mean	SD	
Priest Rapids Reservoir	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	10	15	12.5	3.5	
Wanapum Reservoir	2.6%	36.8%	47.4%	2.6%	2.6%	7.9%	0	20	6.8	5.5	

Project-level responses to the question “How long of a wait to launch your boat is acceptable to you?”

Table E.28 Acceptability of waiting times to use boat launch (in minutes) – Project-level

Acceptable waiting times (in minutes)										
0	1-5	6-10	11-15	16-20	21-25	>25	Min	Max	Mean	SD
13.4%	21.9%	31.6%	20.9%	6.4%	.5%	5.3%	0	120	11.2	12.3

Reservoir-level responses to the question “How long of a wait to launch your boat is acceptable to you?”

Table E.29 Acceptability of waiting times to use boat launch (in minutes) – Reservoir-level

	Acceptable waiting times (in minutes)							Min	Max	Mean	SD
	0	1-5	6-10	11-15	16-20	21-25	>25				
Priest Rapids Reservoir	22.2%	33.3%	11.1%	27.8%	0.0%	0.0%	5.6%	0	45	9.3	10.7
Wanapum Reservoir	12.4%	20.7%	33.7%	20.1%	7.1%	0.6%	5.3%	0	120	11.4	12.5

Note: For the remaining questions in this section, the photos referenced in the question are contained in Appendix D. Photos 1 through 6 represent 27.4, 13.7, 9.1, 6.9, 4.6, and 3.4 acres per boat, respectively. Because these question are designed and worded to assess crowding on segments of the reservoir used by respondents (presumably on one reservoir or the other), no Project-level results are presented here.

Reservoir-level responses to the question: “We would like to know how many boats you think could use the segments of the reservoirs that you used today without you feeling too crowded and unsafe. To help judge this, we have a series of photos that show different numbers of boats. Please look at these photos.”

Please rate each photo by indicating how acceptable you think “how many boats could use the segments of the reservoirs that you used today without you feeling too crowded and unsafe”. A rating of -4 means the number of boats is “very unacceptable”, and a rating of +4 means the number of boats is “very acceptable”.

Table E.30 Priest Rapids Reservoir – Reservoir-level

	Mean	SD	N
Photo 1	3.14	1.6	21
Photo 2	3.19	1.5	21
Photo 3	2.81	1.5	21
Photo 4	2.33	1.9	21
Photo 5	.81	2.5	21
Photo 6	.24	2.7	21

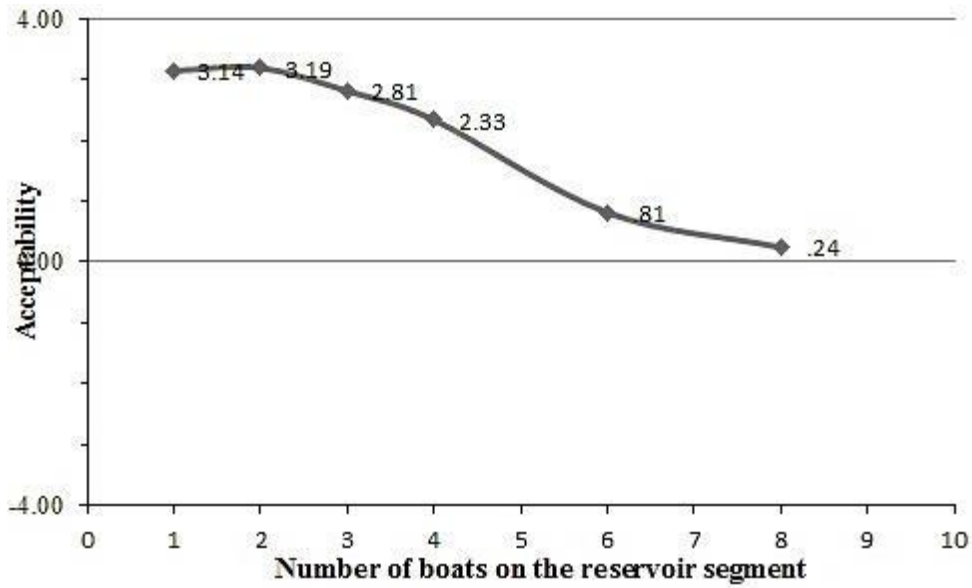


Figure E.2 Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at Priest Rapids Reservoir

Table E.31 Wanapum Reservoir – Reservoir-level

	Mean	SD	N
Photo 1	3.3	1.7	169
Photo 2	3.3	1.6	167
Photo 3	3.2	1.6	165
Photo 4	2.9	1.8	163
Photo 5	2.3	2.1	170
Photo 6	1.9	2.5	169

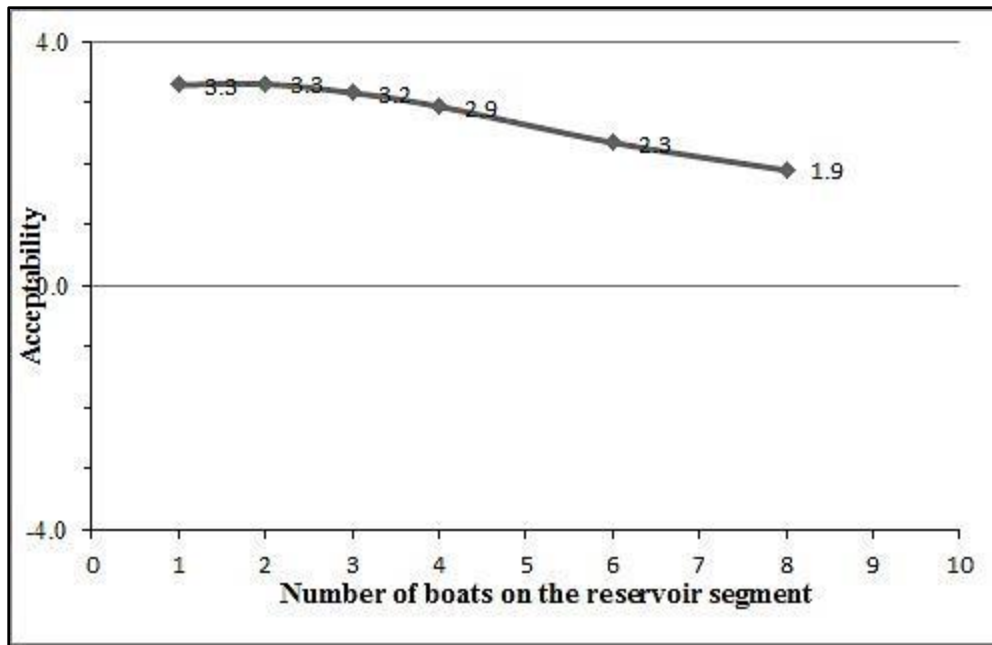


Figure E.3 Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at Wanapum Reservoir

Reservoir-level responses to the question: “Which photo shows the highest number of boats that should be allowed on the reservoir segments you used today? In other words, at what point should boats be restricted from using the reservoir because it is too crowded and unsafe? (If you think use should not be restricted, please indicate)”

Table E.32 Highest number of boats to be allowed on the reservoir segment – Reservoir-level

Photo	Photo 1	Photo 2	Photo 3	Photo 4	Photo 5	Photo 6	Mean	SD
Priest Rapids Reservoir	12.5%	-	12.5%	37.5%	25.0%	12.5%	4.0	1.5
Wanapum Reservoir	1.8%	8.9%	8.9%	14.3%	25.0%	41.1%	4.8	1.4

Note: Photos 1 through 6 are shown in Appendix D

Reservoir-level responses indicating that “None of the photos show a high enough number of boats to restrict use” (check box if you agree). This response could be indicated instead of selecting a photo in the prior question.

Table E.33 Agreement that of all the photos shown, none show a high enough number of boats to restrict use – Reservoir-level

	Indicated	N	Did not indicate	N
Priest Rapids Reservoir	58.8%	10	41.2%	7
Wanapum Reservoir	68.2%	105	31.8%	49

Note: Photos are shown in Appendix D

Reservoir-level responses to the question “Which photo looks most like the number of boats you typically saw on the reservoir segments you used today?”

Table E.34 Number of boats typically seen on the reservoir – Reservoir-level

	Photo 1	Photo 2	Photo 3	Photo 4	Photo 5	Photo 6	Mean	SD
Priest Rapids Reservoir	30.0%	30.0%	25.0%	5.0%	5.0%	5.0%	2.4	1.4
Wanapum Reservoir	13.1%	13.8%	15.4%	18.5%	11.5%	27.7%	3.9	1.8

Note: Photos 1 through 6 are shown in Appendix D

Visitor Perceptions of Issues and Suggestions for Changes

Project-level response to the question “Did any of the following conditions adversely affect your trip? (mark all that apply)”

Table E.35 Conditions adversely affecting trip – Project-level

	Yes	No
Strong winds	55.1%	44.9%
Lack of shade from the sun	41.0%	59.0%
Low water levels	17.2%	82.8%
Lack of shelter from the weather	7.4%	92.6%
Lack of ADA accessibility	2.3%	97.7%

Reservoir-level responses to the question “Did any of the following conditions adversely affect your trip?”

Table E.36 Priest Rapids Reservoir – Reservoir-level

	Yes	No
Strong winds	66.7%	33.3%
Lack of shade from the sun	37.5%	62.5%
Low water levels	4.2%	95.8%
Lack of shelter from the weather	4.2%	95.8%
Lack of ADA accessibility	4.2%	95.8%

Table E.37 Wanapum Reservoir – Reservoir-level

	Yes	No
Strong winds	53.3%	46.7%
Lack of shade from the sun	41.6%	58.4%
Low water levels	19.3%	80.7%
Lack of shelter from the weather	7.9%	92.1%
Lack of ADA accessibility	2.0%	98.0%

Project-level themes emerging from the open ended question “If the above conditions affected your trip, describe how.

Note: Qualitative themes are only presented at the Project-level. Frequencies of themes are not presented because of the qualitative nature of these results. However, each theme represents responses from multiple respondents, not just one. Singular responses are not presented as a theme or a result, but may be found in the original data set.

Table E.38 Themes describing how conditions adversely affected a trip – Project-level

Bothered/inconvenienced due to weather conditions (i.e., where weather conditions have affected the person)
Issues due to access
Issues with lack of facilities (e.g., shade and windbreaks needed, ramp length an issue in low water)
No issues/ no problems
Impact on activity due to conditions (i.e., where water, wind, sun, or heat specifically affected the activity)

Project-level response to the question “Grant PUD is interested in your opinion about the level of existing development and management at the reservoirs. Please indicate a response for any of the following facilities you used during your visit.”

Table E.39 Opinions on development and management – Project level

	Too high		About right				Too Low		DK	Mean	SD	
Number of public docks	0.6%	1.5%	2.3%	2.7%	58.8%	4.2%	9.3%	5.9%	14.6%	26.3%	5.8	1.7
Number of restrooms/toilets	0.9%	0.9%	0.6%	1.1%	65.5%	5.6%	8.1%	3.4%	13.9%	5.1%	5.7	1.6
Number of hiking trails	2.6%	1.0%	3.8%	2.9%	58.8%	6.0%	9.4%	3.8%	11.8%	34.4%	5.6	1.7
Quality of restrooms/toilets	2.2%	1.2%	3.8%	4.0%	60.0%	4.8%	8.7%	3.2%	12.0%	10.7%	5.5	1.7
Quality of public docks	1.1%	1.5%	3.9%	3.9%	64.0%	3.3%	5.9%	4.6%	11.8%	27.5%	5.5	1.7
Quality of hiking trails	1.8%	1.5%	2.3%	4.8%	62.6%	7.0%	5.8%	2.8%	11.6%	36.2%	5.5	1.6
Number of campsites	1.5%	1.1%	1.9%	3.7%	67.9%	3.2%	5.8%	4.1%	10.8%	26.5%	5.5	1.6
Amount of shoreline available for use	2.3%	1.5%	3.4%	5.4%	60.2%	5.8%	9.1%	3.2%	9.1%	5.5%	5.4	1.6
Number of swim/sunbathing areas	1.4%	1.0%	3.8%	3.8%	63.3%	6.7%	11.1%	3.9%	5.1%	10.9%	5.4	1.4
Number of boat launches	0.9%	0.9%	2.6%	3.3%	72.3%	3.5%	6.1%	2.8%	7.4%	17.4%	5.4	1.4
Quality of swim/sunbathing areas	1.8%	1.1%	4.6%	4.1%	64.5%	6.7%	8.5%	3.4%	5.5%	12.5%	5.3	1.4
Quality of on-line campground reservation system	1.7%	1.2%	1.7%	4.7%	75.9%	3.8%	4.1%	1.2%	5.8%	44.9%	5.2	1.3
Number of picnic or day use areas	2.0%	1.2%	3.7%	5.1%	70.5%	5.4%	4.4%	2.0%	5.6%	10.2%	5.1	1.4
Quality of campsites	2.0%	2.0%	3.4%	3.2%	71.9%	6.1%	3.8%	2.3%	5.2%	30.0%	5.1	1.4
Quality of boat launches	1.5%	3.4%	6.2%	5.4%	66.5%	3.7%	3.9%	2.6%	6.7%	18.2%	5.1	1.5
Quality of picnic or day use areas	2.1%	2.4%	4.1%	6.6%	68.2%	5.0%	5.2%	1.6%	4.8%	9.8%	5.1	1.4
Level of public recreation development	2.9%	1.3%	2.0%	3.6%	77.3%	4.6%	3.1%	0.8%	4.4%	5.4%	5.0	1.2
Cost to use facilities	6.3%	1.6%	4.5%	4.9%	78.2%	1.0%	0.6%	0.4%	2.5%	20.9%	4.7	1.3

Note: Response Scale 1= Too high, 5=About Right, 9= Too Low

Reservoir-level responses to the question “Grant PUD is interested in your opinion about the level of existing development and management at the reservoirs. Please indicate a response for any of the following facilities you used during your visit.”

Table E.40 Opinions on development and management on the Priest Rapids Reservoir – Reservoir-level

	Too high			About right				Too Low		DK	Mean	SD
Amount of shoreline available for use	2.9%	0.0%	0.0%	2.9%	65.7%	2.9%	8.6%	0.0%	17.1%	5.4%	5.7	1.8
Number of public docks	0.0%	3.0%	3.0%	1.5%	68.2%	1.5%	4.5%	6.1%	12.1%	14.3%	5.6	1.7
Number of restrooms/toilets	1.3%	1.3%	1.3%	0.0%	74.0%	2.6%	10.4%	1.3%	7.8%	2.5%	5.5	1.4
Number of hiking trails	0.0%	1.9%	7.7%	1.9%	63.5%	1.9%	13.5%	3.8%	5.8%	27.8%	5.4	1.5
Number of swim/sunbathing areas	0.0%	0.0%	4.8%	0.0%	71.0%	8.1%	11.3%	3.2%	1.6%	16.2%	5.4	1.1
Number of campsites	0.0%	1.8%	0.0%	1.8%	83.9%	1.8%	1.8%	3.6%	5.4%	22.2%	5.3	1.2
Quality of swim/sunbathing areas	0.0%	0.0%	3.3%	3.3%	73.8%	4.9%	14.8%	0.0%	0.0%	17.6%	5.2	0.9
Quality of restrooms/toilets	1.4%	1.4%	5.5%	2.7%	71.2%	8.2%	4.1%	1.4%	4.1%	6.4%	5.1	1.3
Quality of on-line campground reservation system	0.0%	2.3%	0.0%	4.7%	81.4%	4.7%	4.7%	0.0%	2.3%	38.6%	5.1	0.9
Quality of public docks	0.0%	3.2%	7.9%	1.6%	76.2%	3.2%	1.6%	3.2%	3.2%	14.9%	5.0	1.2
Number of picnic or day use areas	3.1%	3.1%	0.0%	4.6%	81.5%	0.0%	1.5%	0.0%	6.2%	13.3%	5.0	1.4
Cost to use facilities	0.0%	0.0%	0.0%	1.5%	96.9%	1.5%	0.0%	0.0%	0.0%	15.6%	5.0	0.2
Number of boat launches	0.0%	1.4%	4.3%	2.9%	82.9%	2.9%	5.7%	0.0%	0.0%	9.1%	5.0	0.8
Quality of campsites	0.0%	1.9%	3.7%	0.0%	87.0%	5.6%	0.0%	1.9%	0.0%	26.0%	5.0	0.7
Quality of hiking trails	0.0%	3.8%	5.8%	1.9%	78.8%	1.9%	5.8%	0.0%	1.9%	25.7%	5.0	1.1
Level of public recreation development	4.0%	1.3%	2.7%	0.0%	85.3%	4.0%	1.3%	0.0%	1.3%	5.1%	4.9	1.1
Quality of picnic or day use areas	1.6%	3.1%	4.7%	7.8%	75.0%	3.1%	1.6%	0.0%	3.1%	12.3%	4.9	1.2
Quality of boat launches	1.4%	5.6%	11.3%	5.6%	71.8%	2.8%	0.0%	1.4%	0.0%	10.1%	4.6	1.1

Note: Response Scale 1= Too high, 5=About Right, 9= Too Low

Table E.41 Opinions on development and management on the Wanapum Reservoir – Reservoir-level

	Too high		About right				Too Low		DK	Mean	SD	
Number of public docks	0.7%	1.2%	2.2%	2.9%	57.2%	4.7%	10.1%	5.9%	15.0%	28.0%	5.9	1.7
Number of restrooms/toilets	0.9%	0.9%	0.5%	1.2%	64.4%	6.1%	7.8%	3.6%	14.7%	5.4%	5.8	1.6
Quality of public docks	1.3%	1.3%	3.3%	4.3%	62.0%	3.3%	6.6%	4.8%	13.2%	29.2%	5.6	1.7
Number of hiking trails	3.0%	0.8%	3.3%	3.0%	58.1%	6.6%	8.8%	3.8%	12.6%	35.3%	5.6	1.8
Quality of restrooms/toilets	2.3%	1.1%	3.6%	4.2%	58.5%	4.4%	9.3%	3.4%	13.1%	11.3%	5.6	1.8
Quality of hiking trails	2.0%	1.2%	1.7%	5.2%	60.1%	7.8%	5.8%	3.2%	13.0%	37.5%	5.6	1.7
Number of campsites	1.7%	1.0%	2.2%	3.9%	65.7%	3.4%	6.4%	4.2%	11.5%	27.0%	5.6	1.6
Number of boat launches	1.1%	0.9%	2.4%	3.4%	70.7%	3.6%	6.2%	3.2%	8.5%	18.5%	5.4	1.5
Number of swim/sunbathing areas	1.5%	1.1%	3.6%	4.2%	62.4%	6.5%	11.1%	4.0%	5.5%	10.3%	5.4	1.5
Amount of shoreline available for use	2.2%	1.6%	3.8%	5.7%	59.5%	6.2%	9.2%	3.7%	8.1%	5.5%	5.4	1.6
Quality of swim/sunbathing areas	2.0%	1.2%	4.8%	4.2%	63.4%	6.9%	7.7%	3.8%	6.1%	11.9%	5.3	1.5
Quality of on-line campground reservation system	2.0%	1.0%	2.0%	4.7%	75.1%	3.7%	4.0%	1.3%	6.3%	45.7%	5.2	1.3
Quality of boat launches	1.5%	3.0%	5.4%	5.4%	65.7%	3.9%	4.5%	2.8%	7.8%	19.3%	5.2	1.6
Number of picnic or day use areas	1.9%	1.0%	4.2%	5.2%	69.1%	6.1%	4.8%	2.3%	5.5%	9.8%	5.2	1.4
Quality of campsites	2.3%	2.1%	3.4%	3.6%	69.8%	6.2%	4.4%	2.3%	5.9%	30.5%	5.2	1.4
Quality of picnic or day use areas	2.1%	2.3%	4.1%	6.4%	67.4%	5.2%	5.6%	1.7%	5.0%	9.5%	5.1	1.4
Level of public recreation development	2.8%	1.3%	1.9%	4.1%	76.2%	4.6%	3.3%	0.9%	4.8%	5.4%	5.1	1.3
Cost to use facilities	7.2%	1.8%	5.2%	5.4%	75.5%	0.9%	0.7%	0.4%	2.9%	21.7%	4.7	1.4

Note: Response Scale 1= Too high, 5=About Right, 9= Too Low

Project-level response to the question “Please indicate the extent that the following issues were problems for you during your visit today.”

Table E.42 Issues that caused problems during the visit – Project-level

	No Problem							Big problem		DK	Mean	SD	N
Adequate protection from the wind	51.4%	6.3%	7.6%	7.6%	13.2%	4.1%	4.3%	2.2%	3.2%	6.8%	2.8	2.4	676
Adequate information/warnings provided	66.5%	8.2%	6.1%	3.7%	8.0%	2.2%	2.7%	0.6%	1.9%	7.6%	2.1	1.9	674
Litter around the reservoir shoreline	66.3%	10.8%	5.6%	2.4%	5.2%	3.6%	2.9%	1.4%	1.8%	4.5%	2.0	1.9	689
Disruptive behavior by others	72.5%	6.9%	4.4%	2.8%	6.7%	1.3%	2.2%	1.3%	2.0%	5.9%	1.9	1.9	679
Adequate safety and security	73.4%	8.7%	5.1%	3.4%	3.7%	1.7%	1.7%	1.1%	1.1%	5.7%	1.8	1.7	682
Other	38.2%	18.2%	0.0%	1.8%	9.1%	0.0%	3.6%	0.0%	29.1%	21.4%	4.1	3.4	70
<i>Other Text: Refer to site-level survey results in the appendix</i>													

Note: Response scale 1= No problem, 9 = Big problem

Reservoir-level responses to the question “Please indicate the extent that the following issues were problems for you during your visit today”

Table E.43 Issues that caused problems during the visit for Priest Rapids Reservoir – Reservoir-level

	No Problem							Big problem		DK	Mean	SD	N
Adequate protection from the wind	55.7%	6.3%	6.3%	6.3%	16.5%	1.3%	2.5%	2.5%	2.5%	4.8%	2.6	2.2	83
Litter around the reservoir shoreline	81.7%	9.8%	1.2%	0.0%	2.4%	0.0%	0.0%	1.2%	3.7%	3.5%	1.6	1.8	85
Adequate information/warnings provided	80.8%	6.4%	3.8%	3.8%	3.8%	0.0%	0.0%	0.0%	1.3%	7.1%	1.5	1.3	84
Disruptive behavior by others	87.0%	2.6%	3.9%	0.0%	5.2%	0.0%	0.0%	0.0%	1.3%	8.3%	1.4	1.3	84
Adequate safety and security	85.2%	7.4%	3.7%	0.0%	1.2%	1.2%	0.0%	0.0%	1.2%	3.6%	1.4	1.2	84
Other	14.3%	42.9%	0.0%	0.0%	14.3%	0.0%	0.0%	0.0%	28.6%	0.0%	4.3	3.3	14
<i>Other Text- Refer to site-level survey results in the appendix</i>													

Note: Response scale 1= No problem, 9 = Big problem

Table E.44 Issues that caused problems during the visit for Wanapum Reservoir – Reservoir-level

	No Problem							Big problem		DK	Mean	SD	N
Adequate protection from the wind	50.8%	6.4%	7.8%	7.8%	12.7%	4.5%	4.5%	2.2%	3.3%	7.1%	2.9	2.4	593
Adequate information/warnings provided	64.4%	8.4%	6.4%	3.7%	8.6%	2.6%	3.1%	0.7%	2.0%	7.6%	2.2	2.0	590
Litter around the reservoir shoreline	64.1%	10.9%	6.3%	2.8%	5.6%	4.2%	3.3%	1.4%	1.6%	4.6%	2.2	2.0	604
Disruptive behavior by others	70.5%	7.5%	4.4%	3.2%	6.9%	1.4%	2.5%	1.4%	2.1%	5.5%	2.0	2.0	595
Adequate safety and security	71.7%	8.9%	5.3%	3.9%	4.1%	1.8%	2.0%	1.2%	1.1%	6.0%	1.9	1.7	598
Other	46.3%	9.8%	0.0%	2.4%	7.3%	0.0%	4.9%	0.0%	29.3%	26.8%	4.1	3.6	56
<i>Other Text- Refer to site-level survey results in the appendix</i>													

Note: Response scale 1= No problem, 9 = Big problem

Note: The remaining result tables in this section present themes that emerged from qualitative responses to open-ended questions. Qualitative themes are only presented at the Project-level. Frequencies of themes are not presented because of the qualitative nature of these results. However, each theme represents responses from multiple respondents, not just one. Singular responses are not presented as a theme or a result, but may be found in the original data set.

Project-level themes that emerged from the question “What did you like most about your visit?”

Table E.45 Themes and examples describing what respondents like most about their visit – Project-level

Theme	Theme examples
Aesthetics	Scenic beauty, nature, natural features or characteristics
Quality of operations and maintenance	Quiet, good staff, lack of crowding, atmosphere, safety, cleanliness
Site development	Everything pertaining to the recreation site including boat launches, beach, water, campsite, ease of access, new/update facilities, parking, bathrooms, signs, and safety
All of the above/everything	Answers mentions "everything" or multiple themes from above

Project-level themes that emerged from the qualitative responses to the open-ended question “What did you like least about your visit?”

Table E.46 Themes and examples describing what respondents like least about their visit – Project-level

Theme	Theme examples
No concerns	There was nothing about the experience I didn't like
Weather/shelter	Heat, wind, choppy water, need more shade and covered picnic/camp areas.
Support facilities	Proximity to highway (too close/too noisy), proximity to grocery/resources (too far).
Crowding and user conflicts	Too many people, poor etiquette (leaving trash, loud music, noise level, etc.) from other patrons, complaints about pets
Site Development	Too many gravel roads (prefer paved) and rocky beaches (prefer sand)
Operations and Maintenance	Dirty bathrooms, glass, litter, weeds, overgrown brush on beaches and grounds generally, lack of trash bins, excess of geese/duck feces, odors/murkiness in water, too many bugs (spiders specifically), negative customer relations with patrons, surveying patrons
Extraneous/Out of PUD management control	Boat broke down, had to leave early, family couldn't come, poor communication about event scheduling and cancellations, fishing success, air quality (smoke).
Parking	Not enough parking or parking being inappropriately used (vehicles using trailer parking)

Continued.../

Quality of facilities	Need more restrooms (with sanitizer, showers), kid friendly areas (recent park addition was poorly rated), swimming areas, campsites, potable water near campsites, condition of restrooms and other amenities, lack of food and beverage services, boat launches and docks in need of repair/redesign (e.g., dangerous, unstable, too small, or missing dock entirely), sites closed or under construction
Fees and regulations	Charging fees, fire restrictions, and restricted fishing areas (e.g., docks), intimidating policing of sites, Discovery Pass
Water level	Water table too low/receding

Project-level themes that emerged from the qualitative responses to the open-ended question “If you could ask Grant PUD to change some things about the way they manage recreation at Wanapum and Priest Rapids reservoirs, what would you ask them to do?”

Table E.47 Themes and examples describing suggestions respondents had for Grant PUD Management – Project-level

Theme	Theme examples
No complaints or suggestions	Have no complaints, no suggestion, like site as it is, don't know
Maintenance and improvement of facilities	Improving condition or cleanliness of existing facility
Increase in number of facilities/Adding new facilities	More access, more shade, increase or add facilities like parking spots and benches
Improving management/operations	Signs, personnel, crowd control

Recreational Use in Reservoir Segments

Site-level responses to the question, “If you were on the water today, what areas of the Priest Rapids/Wanapum reservoirs did you use today? (mark all areas used)”. The map below was used by respondents to indicate their use locations.

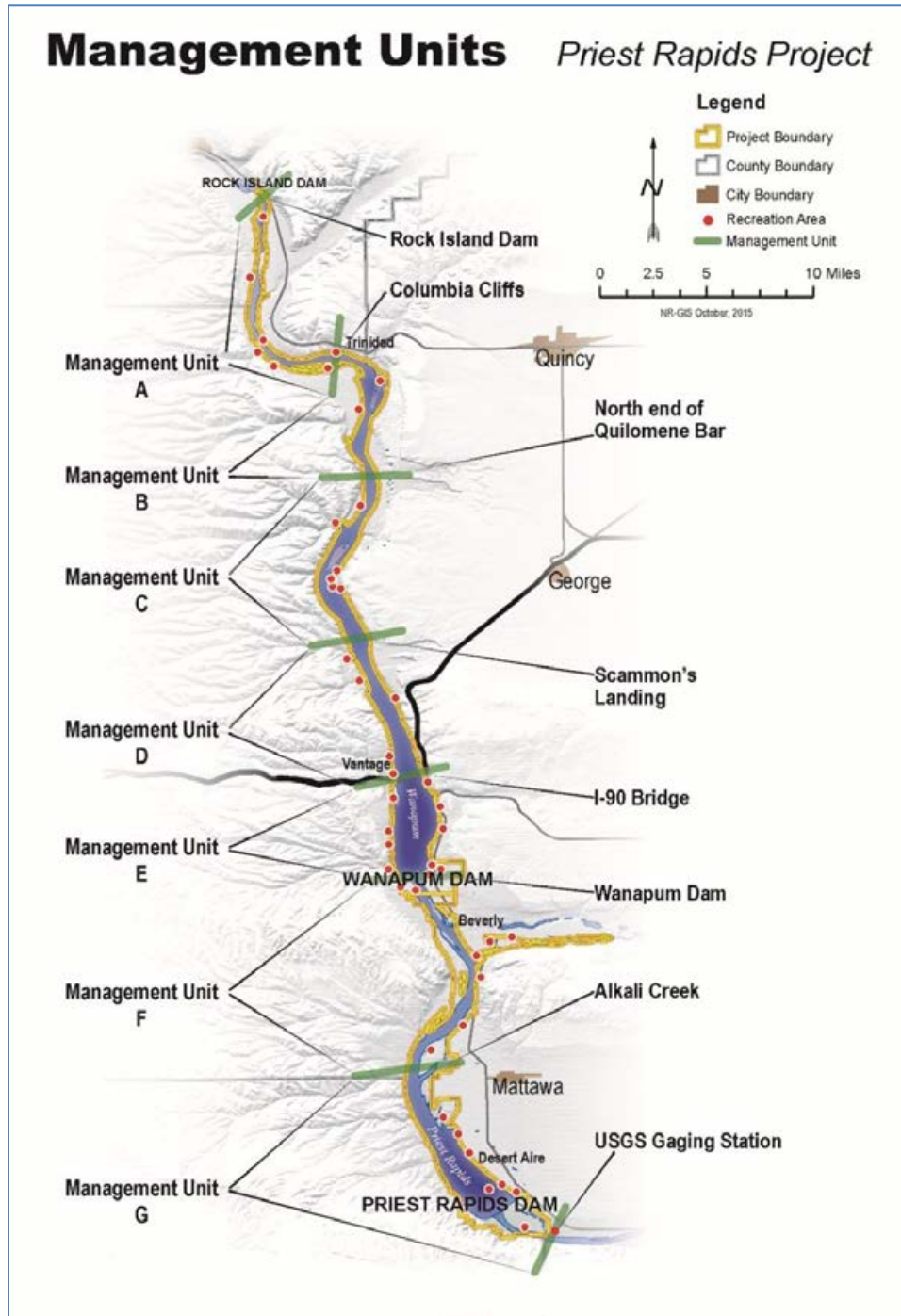


Figure E.4 Map used by respondents to indicate the locations they used on the Project reservoirs. The management unit names and boundaries were not shown to respondents.

Project-level responses to the question “If you were on the water today, what areas of the Priest Rapids/Wanapum reservoirs did you use today? (Mark all areas used)”

Table E.48 Percent who used different management unit areas on the project – Project-level

Site	Unit A	Unit B	Unit C	Unit D	Unit E	Unit F	Unit G	N
% respondents who used area	14.5%	41.0%	59.0%	23.0%	19.5%	5.5%	9.5%	200

Reservoir-level responses to the question “If you were on the water today, what areas of the Priest Rapids/Wanapum reservoirs did you use today? (Mark all areas used)”

Table E.49 Percent response on used areas of the Priest Rapids/Wanapum Reservoirs – Reservoir-level

	% response indicating use in the area							
	Wanapum Reservoir Management Units					Priest Rapids Reservoir Management Units		N
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit F	Unit G	
Priest Rapids Reservoir Respondents	9.5%	9.5%	9.5%	9.5%	14.3%	28.6%	76.2%	21
Wanapum Reservoir Respondents	15.1%	44.7%	64.8%	24.6%	20.1%	2.8%	1.7%	179

Recreational Use Estimates

As described in the methods section of this report, use counts were conducted for a majority of sites and amenities on the Project, either by field cameras or observer-based counts. The results of field camera counts are detailed for each site in Appendix C. The following table shows a summary of these counts by reporting the number of vehicles and/or people that resulted from field cameras counts during the data collection period. Where vehicles were the basis of counts (i.e., with most field cameras) these were translated into an equivalent number of people by using the most relevant survey data on the number of people per vehicle. Observer-based count results are also shown in the table below.

To derive an annual estimate of recreation use of the Project several adjustments were made to the counts resulting from the data collection period. Specifically, the counts were adjusted upward (by the percentage shown in the table below) to account for times outside of the data collection period, both during the day and throughout the peak use season. Also, adjustments were made to account for use at a site that might not have been observed by the field cameras or the observers, and for times of the year outside of the peak use season. Adjustment factors were derived from Grant PUD staff input, the judgment of the PI, and the empirical data contained in Appendix C. **The outcomes of this process are estimated annual use counts for each amenity and a use estimate of 346,597 Recreation Days for the Project.** It should be noted that for marinas, the golf course, and some campgrounds, where use empirical data were unavailable or unreliable, use number estimates are based on the judgment of Grant PUD staff and the PI.

Table E.50 Use count data, calculation parameters, and site and Project-level use estimates

Site name	Amenity	# Vehicles Counted or Observed During Data Collection	People/Vehicle	# People Calculated From or Observed During Data Collection	Number of Data Collection Days	Adjustment for Use at Other Times of Day Than Counted or Observed	Adjustment to entire peak use season (84 days)	Adjustment for Areas Outside of Photo or Observation View	Peak Season Use Estimate (People; Recreation Days)	Adjustment For Non-Peak Season Use	Annual Use Estimate
Columbia Siding	Access Point	-	-	0	4	80%	84.0	0%	0	20%	0
A6 Memorial	Informal Use Area (Boat In)	-	-	18	4	80%	21.0	0%	680	20%	816
Tarpiscan Creek	Hunting Area	-	-	1	4	80%	21.0	0%	38	20%	45
Apricot Orchard Boat Launch	Access Point	-	-	4	4	80%	21.0	0%	151	20%	181
Apricot Orchard Boat Launch	Hunting Area	-	-	0	4	80%	84.0	0%	0	20%	0
Columbia Cliffs	Informal Use Area (Boat In)	-	-	23	4	80%	21.0	0%	869	20%	1,043
Upper West Bar	Hunting Area	-	-	2	4	80%	21.0	0%	76	20%	91
Lower West Bar	Informal Use Area (Boat In)	-	-	38	4	80%	21.0	0%	1,436	20%	1,724
CBRA Off-Is.	Boat Launch	2820	4.5	12,690	32	20%	2.6	20%	47,968	20%	57,562
CBRA Off-Is.	Campground	-	-	-	-	-	-	-	9,389	20%	11,267
CBRA Off-Is.	Marina	-	-	-	-	-	-	-	596	20%	715
CBRA Off-Is.	Access Point	-	-	30	4	80%	21.0	0%	1,134	20%	1,361
CBRA On-Is .	Active Recreation Area	340	4.5	1,530	32	20%	2.6	20%	5,783	20%	6,940
CBRA On-Is.	Boat Launch	87	4.5	392	16	20%	5.3	0%	2,466	20%	2,960
CBRA On-Is.	Picnic Area	714	4.5	3,213	32	20%	2.6	50%	15,181	20%	18,218
CBRA On-Is.	Informal Use Area (Boat In)	-	-	50	4	80%	21.0	0%	1,890	20%	2,268
CBRA On-Is. (Golf Course)	Active Recreation Area	-	-	-	-	-	-	-	-	-	9,000

Table E.50 (continued) Use count data, calculation parameters, and site and Project-level use estimates

Site name	Amenity	# Vehicles Counted or Observed During Data Collection	People/Vehicle	# People Calculated From or Observed During Data Collection	Number of Data Collection Days	Adjustment for Use at Other Times of Day Than Counted or Observed	Adjustment to entire peak use season (84 days)	Adjustment for Areas Outside of Photo or Observation View	Peak Season Use Estimate (People; Recreation Days)	Adjustment For Non-Peak Season Use	Annual Use Estimate
Quincy Wildlife Area	Access Point	-		30	4	80%	21.0	0%	1,134	20%	1,361
Rattlesnake Cove	Picnic Area	138	3.1	428	32	20%	2.6	0%	1,348	20%	1,617
Rattlesnake Cove	Swim Area	Accounted for above									
Sunland Boat Launch	Boat Launch	3268	4.2	13,628	32	20%	2.6	0%	42,927	20%	51,512
Sunland Shoreline	Access Point	-	-	160	4	80%	21.0	0%	6,048	20%	7,258
Sunland Picnic Area	Picnic Area	-	-	147	32	20%	2.6	40%	648	20%	778
Quilomene Dune and Bay	Informal Use Area (Boat In)	1426	5.5	7,843	32	20%	2.6	0%	24,705	20%	29,647
Quilomene Dune and Bay	Dispersed Camp Area	-	-	2	4	80%	21.0	0%	76	20%	91
Quilomene Bar	Hunting Area	-	-	0	4	80%	21.0	0%	0	20%	0
Whiskey Dick Creek	Hunting Area	-	-	4	4	80%	21.0	0%	151	20%	181
Cayuse Creek	Hunting Area	-	-	0	4	80%	21.0	0%	0	20%	0
Frenchman Coulee Recreation Area	Picnic Area	452	2.1	949	32	20%	2.6	0%	2,990	20%	3,588
Frenchman Coulee Recreation Area	Trail	Accounted for above									
Frenchman Coulee Recreation Area	Boat Launch	Accounted for above									

Table E.50 (continued) Use count data, calculation parameters, and site and Project-level use estimates

Site name	Amenity	# Vehicles Counted or Observed During Data Collection	People/Vehicle	# People Calculated From or Observed During Data Collection	Number of Data Collection Days	Adjustment for Use at Other Times of Day Than Counted or Observed	Adjustment to entire peak use season (84 days)	Adjustment for Areas Outside of Photo or Observation View	Peak Season Use Estimate (People; Recreation Days)	Adjustment For Non-Peak Season Use	Annual Use Estimate
Rocky Coulee	Boat Launch	-	-	85	43	20%	2.0	-	199	20%	239
Rocky Coulee	Campground	-	-	-	-	-	-	-	400	20%	480
Rocky Coulee	Picnic Area	-	-	18	32	20%	2.6	0%	57	20%	68
Riverstone Resort	Access Point	-	-	35	4	80%	21.0	0%	1,323	20%	1,588
Riverstone Resort	Marina	-	-	-	-	-	-	-	-	-	0
Vantage Boat Launch	Boat Launch	3115	2.7	8,411	32	20%	2.6	10%	29,142	20%	34,971
Vantage Boat Launch	Picnic Area	Accounted for above									
Airstrip Access Area	Informal Use Area (Boat In)	-	-	0	4	80%	84.0	0%	0	20%	0
Sand Hollow	Campground	-	-	-	-	-	-	-	1,049	20%	1,259
Sand Hollow	Informal Use Area	-	-	87	4	20%	21.0	0%	2,192	20%	2,631
Sand Hollow	Picnic Area 1	931	3.1	2,886	21	20%	4.0	15%	15,931	20%	19,118
Sand Hollow	Picnic Area 2	Accounted for above									
Sand Hollow	Picnic Area 3	Accounted for above									
Sand Hollow	Swim Area	Accounted for above									
Sand Hollow (North)	Access Point	-	-	6	4	80%	21.0	0%	227	20%	272

Table E.50 (continued) Use count data, calculation parameters, and site and Project-level use estimates

Site name	Amenity	# Vehicles Counted or Observed During Data Collection	People/Vehicle	# People Calculated From or Observed During Data Collection	Number of Data Collection Days	Adjustment for Use at Other Times of Day Than Counted or Observed	Adjustment to entire peak use season (84 days)	Adjustment for Areas Outside of Photo or Observation View	Peak Season Use Estimate (People; Recreation Days)	Adjustment For Non-Peak Season Use	Annual Use Estimate
Wanapum Dam Upper Boat Launch	Boat Launch	108	3	324	32	20%	2.6	0%	1,021	20%	1,225
Wanapum Recreation Area (WSP)	Boat Launch	463	4.4	2,037	32	20%	2.6	0%	6,417	20%	7,701
Wanapum Recreation Area (WSP)	Picnic Area	-	-	2,072	32	20%	2.6	50%	9,790	20%	11,748
Wanapum Recreation Area (WSP)	Swim Area	-	-	1,710	32	20%	2.6	10%	5,925	20%	7,110
Black Sands Beach	Informal Use Area (Boat In)	-	-	95	4	0.8	21.0	0	3,591	0.2	4309
McCumber Beach	Informal Use Area (Boat In)	-	-	51	4	80%	21.0	0%	1,928	20%	2,313
Wanapum Dam Lower Boat Launch	Boat Launch	483	2.3	1,111	32	20%	2.6	0%	3,499	20%	4,199
Wanapum Dam Overlook	Overlook Vista	-	-	3	28	20%	3.0	0%	11	20%	13
Wanapum Dam Overlook	Picnic Area	Accounted for above									
Wanapum Turbine Park	Picnic Area	412	2.1	865	31	20%	2.7	0%	2,813	20%	3,376
Wanapum Turbine Park	Overlook Vista	Accounted for above									
Huntzinger Road Boat Launch	Boat Launch	293	2	586	32	20%	2.6	0%	1,846	20%	2,215

Table E.50 (continued) Use count data, calculation parameters, and site and Project-level use estimates

Site name	Amenity	# Vehicles Counted or Observed During Data Collection	People/Vehicle	# People Calculated From or Observed During Data Collection	Number of Data Collection Days	Adjustment for Use at Other Times of Day Than Counted or Observed	Adjustment to entire peak use season (84 days)	Adjustment for Areas Outside of Photo or Observation View	Peak Season Use Estimate (People; Recreation Days)	Adjustment For Non-Peak Season Use	Annual Use Estimate
Huntzinger Road Fishing Access Site	Reservoir Fishing Amenity	-	-	16	16	20%	5.3	0%	101	20%	121
The Cove	Picnic Area	238	1.7	405	32	20%	2.6	0%	1,274	20%	1,529
The Cove	Boat Launch	Accounted for above									
Crab Creek Park	Access Point	-	-	7	4	80%	21.0	0%	265	20%	318
Burkett Lake Recreation Area	Access Point	-	-	12	4	80%	21.0	0%	454	20%	544
Burkett Lake Recreation Area	Trail	-	-	6	32	80%	2.6	0%	28	20%	34
Burkett Lake Recreation Area	Overlook Vista	-	-	0	32	80%	2.6	0%	0	20%	0
Beverly Sand Dunes ORV Park	Other (ORV Park)	-	-	14	4	80%	21.0	0%	529	20%	635
Beverly Sand Dunes ORV Park	Dispersed Camp Area	-	-	3	4	80%	21.0	0%	113	20%	136
Haystack Rocks	Access Point	-	-	22	4	80%	21.0	0%	665	20%	798
Sentinel Gap	Access Point	-	-	0	4	80%	21.0	0%	0	20%	0
Priest Rapids Wildlife Area	Hunting Area	-	-	0	4	80%	21.0	0%	0	20%	0
Buckshot Recreation Area	Boat Launch	95	2.8	266	32	20%	2.6	0%	838	20%	1,005
Buckshot Recreation Area	Hunting Area	-	-	0	4	80%	28.0	0%	0	20%	0

Table E.50 (continued) Use count data, calculation parameters, and site and Project-level use estimates

Site name	Amenity	# Vehicles Counted or Observed During Data Collection	People/Vehicle	# People Calculated From or Observed During Data Collection	Number of Data Collection Days	Adjustment for Use at Other Times of Day Than Counted or Observed	Adjustment to entire peak use season (84 days)	Adjustment for Areas Outside of Photo or Observation View	Peak Season Use Estimate (People; Recreation Days)	Adjustment For Non-Peak Season Use	Annual Use Estimate
PRRA	Campground	-	-	-	-	-	-	-	1,151	20%	1,382
PRRA	Picnic Area	797	3.9	3,108	20	20%	4.1	0%	15,359	20%	18,430
PRRA	Swim Area					Accounted for above					
PRRA	Trail					Accounted for above					
PRRA (North Picnic Area)	Picnic Area					Accounted for above					
PRRA	Boat Launch					Accounted for above					
Priest Rapids Water Trail (N. Trailhead)	Boat Launch					Accounted for above					
Priest Rapids Water Trail	Boat Launch					Accounted for above					
Priest Rapids Water Trail (S. Trailhead)	Boat Launch					Accounted for above					
Goose Island	Hunting Area	-	-	5	4	80%	21.0	0%	189	20%	227
Wanapum Heritage Center	Visitor Center	-	-	-	-	-	-	-	-	-	2,880
Jackson Creek Fish Camp	Campground	-	-	0	-	-	-	-	300	20%	360
Jackson Creek Fish Camp	Tailwater Fishing Amenity	57	1.6	91	32	20%	2.6	0%	287	20%	345
Priest Rapids Tailrace	Access Point	-	-	4	4	80%	21.0	0%	151	20%	181
Yo Yo Rock Boat Launch	Boat Launch	91	3.8	346	16	20%	5.3	0%	2,179	20%	2,614
Total		-	-	-	-	-	-	-	278,929	-	346,597

Two other use estimates are then derived from the above described estimate of annual use counts. First, the proportion of day to overnight visitors found in the survey results (i.e., 359 to 378 or 48.7% to 51.3%, respectively) was used to calculate the number of annual daytime visitors and nighttime visitors. Since FERC does not formally define daytime and nighttime visitors, these were considered here to be equivalent to day visitors (staying less than 24 hours) and overnight visitors (staying 24 or more hours), regardless of if they stayed within the Project or not. **This analysis indicates that the annual use on the Project consists of an estimated 168,793 daytime Recreation Days and 177,804 nighttime Recreation Days.**

Second, a peak weekend use estimate was derived from the annual use estimate (Table E.52). To do this, an ‘average number of counts per counting day’ was first calculated for weekdays, non-holiday weekends, and holiday (i.e., peak) weekend days. The number of days that use information was counted and the total number of counts of vehicles and people on these days were used as a basis for this calculation. Only sites where counts were conducted on holidays (in addition to weekends and weekdays) were considered in this calculation. The ‘average counts per counting’ day was then weighted by multiplying it by the ‘number of days of that type occurring in the peak season’. The outcome of this showed that the two holiday weekends (6 days total) account for 11.4% of the peak season use. Multiplying half of this percentage (5.7%, the percentage attributable to one, 3-day peak season holiday) by the total peak use season estimate of 278,929 Recreation Days gives a peak holiday weekend use estimate of 15,788 Recreation Days. **Proportioning this by daytime and overnight visitors, as previously described, results in an estimate of 7,689 daytime Recreation Days and 8,099 nighttime Recreation Days of use on peak holiday weekends on the Project.**

Table E.51 – Calculation parameters and estimates for use on holidays, non-holiday weekends, and weekdays

	Peak Holidays	Non-Holiday Weekends	Weekdays	Totals
Number of count days	55	118	350	523
Number of counts (vehicles and people)	13,600	36,259	32,788	82,647
Average counts per counting day	247	307	94	648
Number of days of this type in peak season	6	20	58	84
Weighted total counts	1,484	6,146	5,433	13,063
Percentage of total counts	11.4%	47.0%	41.6%	100.0%
Estimate for one peak holiday (3 days)	15,788	-	-	-
Daytime visitors	7,689	-	-	-
Nighttime visitors	8,099	-	-	-

F. Discussion and Conclusions

The combination of results from visitor surveys and use counting techniques serve as a strong empirical basis for understanding, reporting on, and managing recreation on the Priest Rapids and Wanapum reservoirs. Survey sampling was conducted at a representative selection of 24 high and low use sites across the Project. Also, sampling techniques were used to help ensure that the sampling of visitors was unbiased. Also, use counting, either with observer or field cameras, occurred at almost all amenities on the Project. This resulted in a sample of over 748 completed visitor surveys and over 60,000 photo observations of use. In short, a robust and representative sample of user attitudes and use numbers was collected. For example, when considering the visitor surveys the sample size for the Project produces results that are accurate within 3.6% (with a confidence level of 95%).

Use on the Project is nearly 350,000 Recreation Days annually. However, most of this use is concentrated on the Wanapum Reservoir and its associated recreation sites. Only about 10% of the overall use of the Project occurs on the Priest Rapids Reservoir. Most users live locally or are from major cities in western Washington. Also, there is a relatively equal balance of day and overnight visitors. This shows that the Project acts as both a day use destination for recreation and as a recreation destination for people who are on lengthier vacations. The latter of these might be accounted for by the predominance of camping or the fact that several local communities also act as vacation destinations or locations for owners of second homes, such as Crescent Bar, Sunland Estates and Desert Aire.

The impact of the Project is economical, as well as recreational. The average expenditure on a Recreation Day is \$291, while the median expenditure is \$100. The latter of these values likely reflects a more typical expenditure during a Recreation Day. By multiplying this amount by the number of Recreation Days annually, the Project's direct contribution from recreation visitors alone to the local economy can be valued at approximately \$35,000,000. When considering how these direct expenditures are re-spent, often more than once, within the local economy, the overall economic impact of recreational use at the Project is even higher in terms of dollars and jobs contributed.

Use of the Project reflects its role as a place predominately for water-based recreation. The most common recreational activities included swimming, visiting the beach, resting/relaxing, and boating. Most people participate in multiple activities during a visit, but boating was the primary activity for the largest percentage of people visiting the Project. Surprisingly, a relatively small percentage of visitors reported engaging in activities such as visiting a dam, hiking, attending a concert, and fishing. Also, the relatively high number of people per vehicle (3.8) is probably a reflection of the Project's use as a water-based destination for recreation, which often occurs in larger groups.

Survey results suggest that visitors to the Project are being provided high-quality recreation experiences. Specifically, visitors indicated very low levels of crowding on both reservoirs and for the Project itself. But, when asked what they expected in terms of crowding, visitors anticipated almost twice the amount of crowding experienced, although expected crowding was still low to moderate. This indicates that visitors' expectations for solitude are being exceeded, but it might also suggest that the public perceives crowding issues on the Project that are not reflected in the reality of their on-site experiences. Also,

when asked to evaluate the quality and number of facilities on the reservoirs visitors indicated that they were generally “about right.”

No pervasive or serious recreation-related issues were noted by visitors. When asked about potential issues (i.e., adequate protection from the wind, adequate information/warnings, shoreline litter, disruptive behavior by others, adequate safety and security) most people overwhelmingly agreed there were almost no problems at all during their visit. When all potential issues are averaged, visitors rated them 2.1 on a scale of 1 (“no problem”) to 9 (“big problem”). A minority of respondents opted to provide ‘other’ issues that were rated as a modest problem (4 on a 9 point scale). These ‘other’ issues ranged widely in topic and were more individualistic or site-specific rather than a focused around one consistent topic. However, in a separate question asking specifically about weather conditions, many people did note that strong winds or lack of shade detracted from their experience.

Open-ended questions allowed individuals to provide input in their own words. Specifically, visitors indicated what they enjoyed most and least about their visit to the Project, prior to being informed about potential topics or issues later in the survey. This helped understand the important aspects of the visitor’s experience without bias from other survey content. Themes that emerged from the question of what visitors enjoyed most (i.e., aesthetics, quality of operations and maintenance, and site development) suggest that the recreation amenities provided are, as intended, offering many visitors with an opportunity to enjoy the natural environment through recreation. Themes that emerged from the question of what visitors liked least about their trip were more diverse. These themes included: weather/shelter, support facilities, crowding and user conflicts, site development, operations and maintenance, extraneous factors outside of management control, parking, quality of facilities, fees and regulations, and water levels. Many people also responded by saying there was nothing they liked least about their visit. Responses to the above questions may be best used as indicator variables to focus on when managing the recreational experiences on the Project.

Similarly, visitors offered suggestions for management changes, again in their own words. However, these suggestions were provided near the end of completing the survey, rather than the beginning. This was done to sensitize visitors to the range of topics to consider in providing their responses. The major themes for suggested changes focused on the following: facility maintenance or improvements, increasing or adding facilities, and improving management operations. Again, many people also responded that they had no suggestions for improvement or said they liked the recreation sites as they are now. Responses to the above questions may be best used as ideas or suggestions to improve upon the recreational experiences on the Project.

Recreation quality was also assessed by asking visitors to report standards for the 1) maximum number of people that could use a specific recreation site without them feeling too crowded, and if they were on the water 2) the maximum acceptable time to wait to launch a boat, and 3) the maximum number of boats in view on the water that is acceptable, and 4) the maximum number of boats in view on the water that should be allowed by management. Visitors were then asked to report conditions they actually experienced for all of these variables (i.e., indicators of recreation quality). By comparing reported standards against conditions experienced, carrying capacity and recreation quality were assessed. This process reflects the most predominant and accepted technique in the

scientific community of recreation scholars. Results from the above comparisons indicate that all recreation sites are well below their recreational carrying capacity and that recreational conditions are quite good (i.e., well below the point where experiential standards – as found in Table E.22 – would be violated). Details on this comparison may be found in the *2016 Carrying Capacity Assessment Report* (Hallo et al. 2016).

As with all empirical data collection efforts, the current study and results may be influenced or limited by several factors. First, field conditions during data collection often have an influence on data collection. In particular, the weather can greatly influence recreation use and user attitudes. During the data collection period when the above results are reported, the weather was, on average, warmer and drier than normal (Table F.1). The average wind speed and the number of days of precipitation were typical for the area. The hotter and drier weather during the data collection period could have moderated the use of the Project for recreation. However, it could also be argued that because the Project is primarily focused on water-based recreation, the hotter and drier temperatures would increase the use of its recreation facilities.

Table F.1. Comparison between the weather during the data collection period and a typical season

	2015 Peak Season Weather		Typical Peak Season Weather	
	Avg	Sum	Avg	Sum
Max Daily Temperature (°F)	91		85	
Avg. Daily Temperature (°F)	77		71	
Min. Daily Temperature (°F)	63		58	
Precipitation (in.)		0.14		1.20
Days with precipitation		7		7
Daily wind speed (mph)	9		10	

Sources: wunderground.com, weatherbase.com, wrcc.dri.edu/htmlfiles/westwind.final.html

A second potential limitation is the timing of the study. Most recreation studies focus on the peak use season for the site, because it is often impractical to collect adequate data throughout the entire year. By focusing on the peak use periods, a study is capable of and better suited to examine most recreation use, recreation issues, and recreation management. It is the intent that by understanding and managing for high-quality recreation experiences during the peak season, off-peak recreation quality will also be positively influenced. This study followed the same pattern of focusing attention on the peak use season. However, use occurs on the Project at other times throughout the year. For most recreation activities, off-peak use is relatively minimal compared to peak use levels. However, hunting and salmon fishing are two activities at the Project that predominantly occur during the off-peak season. It is almost certain that hunters and fishermen are relatively underrepresented in the above-presented study results.

A third potential limitation is the number of surveys collected at individual sites and amenities. Survey sample sizes are a reflection of both surveying effort and the number of users at a site. For this report, surveying effort was approximately four days at each

surveyed recreation site. This level of effort resulted in an 81% increase, from 413 to 748, in surveys collected over the prior study conducted in 1999. The 2015 data collection also represents a pragmatic level of effort given the large number of recreation sites and amenities provided at the Project. However, the number of sites surveyed was increased by 100%, from 30 to 60, from the 1999 study. Overall, the sample sizes contained in this report provide results representative of users of the Project and the reservoirs. At some specific recreation sites, survey sample size far exceeded 30, which is often considered a minimum to draw statistical inferences. Survey results at these locations provide a basis for understanding users at these specific sites. However, at lower use sites the survey sample sizes were lower than 30. This is, in part, a reflection of these sites receiving relatively little recreational use. In these cases, where sample sizes are lower, caution should be applied in interpreting the results as representative of all users of the site. Project- or Reservoir-level results may be used as the best supplement or replacement for results at these low-use sites.

Results from the surveys and use counts described above produced a substantial, scientifically based, and reliable source of information to gauge the recreational opportunities and experiences provided on the Project. They also provide many insights into recreation use on the Project and user's attitudes. Some of these findings confirm existing institutional knowledge, while others expand it or provide new information. The entirety of results reported above indicates that the recreation facilities and their management on the Project are effective in providing high-quality recreation experiences and minimizing recreational issues for an overwhelming majority of visitors.

Recreational visitors' positive perceptions of the Project were expected by the PI. The substantial, recent investments made in recreational facilities across the Project have provided updated and expanded recreational opportunities. These facilities combined with the outstanding natural resources of the Columbia River basin and the Wanapum and Priest Rapids reservoirs serve as the fundamental basis for quality recreation. However, proper recreation management is also a crucial part of providing quality recreation. Grant PUD's dedicated program of management directed at lands and recreation on the Project certainly goes a long way in ensuring that adequate recreational opportunities are planned for, managed appropriately, and that issues when present are addressed.

G. RECOMMENDATIONS

Given the positive nature of most of the study results, the primary recommendation is that recreation provision, planning and management continue predominately in its current form. This means that facilities remain open, staffed (where currently provided), and well-maintained and operated. The current recreation facilities seem to provide adequate recreational opportunities and good recreation experiences. It also means that planning and management efforts of recreation-related staff of Grant PUD continue, including their efforts to continue to respond to any emerging recreation-related issues or needs. No current recreation-related issues were noted that would require a management response at a general level. However, it is likely that user specific issues or issues associated with subgroups of users might be present or emerge that would need to be responded to by Grant PUD staff.

We recommend continuing a strong program of both public outreach and public input

efforts. The former suggests continuing to make the public aware of the recreational opportunities at the Project. This should include providing information and marketing through online and traditional media (e.g., print and public forums), and by hosting, participating in, or sponsoring events relevant to recreation on the Project, which can be found in Grant PUD's Interpretation and Education Program. Continuing public input efforts means that public input on public recreation is sought and responded to, where appropriate and possible. And, it means that recreation continues to be a focus of Grant PUD's public service and outreach efforts. This is important because recreation is perhaps one of the most important ways that the general public interacts with Grant PUD and forms personal, lasting memories and attitudes associated with the organization.

The study results do indicate some areas that management efforts might focus on to further improve the recreational experiences on the Project. First, strong winds and lack of shade from the sun were issues mentioned in response to several questions. Based on these results some structures at picnic areas or other day use facilities could be provided that would offer shade and/or wind protection. For example, shade structures such as those found at the Turbine Park could be offered at other picnic sites. Alternatively, 2- to 3-sided roofed structures may be provided to offer both shade and wind protection, while taking care not to limit the user's scenic views. Examples of this type of recreation facility are often found in higher wind environments. Second, the results suggest the importance of the maintenance of facilities to the visitor experience. Bathrooms and litter were most often mentioned in regards to this. Possible improvements to bathrooms could include (where not already present) providing hand sanitizer, posting a phone number on bathroom doors to report maintenance issues, installing air fresheners, and increasing maintenance schedules. Litter is more difficult to control, but increasing maintenance schedules and providing signage to encourage self-removal of litter may have the most impact.

Another recommendation is to establish a quick, cost-effective visitor experience monitoring protocol. This might be structured as a biannual 'rapid assessment' of use conditions and visitor-related issues. It should be limited in scope to allow it to be practical, while providing some objective monitoring data to identify emerging issues or changes in the quality of the recreation experience.

The final recommendation is that the information contained in this report be used to aid recreational resource management on the Project. Foremost, this means that the results and information contained in this report be used to inform the 2016 Recreation Resource Management Plan update. It also means that the results presented here act as a baseline of reliable, science-based information for Grant PUD staff. The intent of this baseline information is to provide a sound basis for current decision-making and for identifying recreation-related changes at the Project in the future.

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APPENDIX A

Management Unit-level Survey Results (Units B – F)

(*no results for Management Unit A)

At the time of the data collections, only one developed recreation site existed in Management Unit A, Yo Yo Rock Boat Launch. It is owned, operated, and maintained by Washington Department of Fish and Wildlife. It is the furthest recreation site from Staff offices at Wanapum Dam. Recreation use counts were conducted via game camera, however because of the impracticality of surveying this low-use site, no survey questionnaires were conducted in Management Unit A.

Table A-B Respondents at each sampling locations for the visitor questionnaire

Intercept Location	Frequency	Percent
Management Unit B	179	23.9%
Management Unit C	154	20.6%
Management Unit D	165	22.1%
Management Unit E	125	16.7%
Management Unit F	51	6.8%
Management Unit G	74	9.9%
Total	748	100.0%

Management Unit B

Note: Management Unit B includes the following sites where surveys occurred:

1. CBRA

Q1 Management unit level responses to the questions

“How many people are in your vehicle today, including yourself? (*mark all that apply*)”

Table A-B.1 Number of people in respondent’s vehicle

	Min	Max	Mean	SD	N
Management Unit B	1	25	4.5	3.3	179

Q3 Management unit level responses to the question

“Please indicate which of the following activities you are participating in on this trip”

Table A-B.3 Management Unit B

	Indicated Yes (% of sample)
Swimming/visiting the beach	86.6%
Resting/relaxing	69.3%
Boating	43.6%
Camping	38.0%
Golf	27.9%
Waterskiing/tubing/wakeboarding	25.7%
Picnicking	24.6%
Photography	20.7%
Wildlife Viewing	20.7%
Attending a concert	20.1%
Riding jet skis/wave runners	19.0%
Canoeing/kayaking/paddle boarding	13.4%
Hiking	6.7%
Fishing	3.4%
Visiting a dam	1.7%
Other	9.5%

Q7 Management unit level responses to the questions

“How much time will you spend on your current trip?”

Table A-B.7 Time spent in hours on current trip

	< 1 hr	1-4 hrs	5-8 hrs	> 8 hrs	Total	Median	Mean	N
Management Unit B	0.0%	61.4%	36.4%	2.3%	100%	4.0	4.3	44

Table A-B.7a Time spent in days on current trip

	1-2 days	3-4 days	5-7 days	>1 week	Total	Median	Mean	N
Management Unit B	14.0%	47.0%	27.0%	11.0%	100%	4.0	5.3	133

Q8 Management unit level responses to the questions

“If your current trip extends into two or more days, what type of overnight accommodations did you use on your trip?”

Table A-B.8 Management Unit B

	Percentage Checked
Campground (RV or tent)	47.6%
<i>Location: Refer to site-level surveys results tables</i>	
Rented cabin/condo/home/motel/hotel	19.9%
<i>Location: Refer to site-level surveys results tables</i>	
Your own home/property	32.2%
Other (<i>Please specify</i>):	5.5%
<i>Other Text: Refer to site-level surveys results tables</i>	

Q9 Management unit level responses to the question

“Did any of the following conditions adversely affect your trip?”

Table A-B.9 Management Unit B

	Yes
Strong winds	37.0%
Lack of shade from the sun	48.1%
Low water levels	21.0%
Lack of shelter from the weather	9.9%
Lack of ADA accessibility	1.2%

Q10 Management unit level responses to the question

“Grant PUD is interested in your opinion about the level of existing development and management at the reservoirs. Please indicate a response for **any** of the following facilities you used during your visit.”

Table A-B.10 Management Unit B

	Too High			About Right				Too Low			DK	Mean	SD
	1	2	3	4	5	6	7	8	9				
Number of restrooms/toilets	0.6%	0.6%	0.0%	0.6%	43.3%	9.6%	10.8%	8.3%	26.1%	6.0%	6.6	1.8	
Quality of restrooms/toilets	0.7%	0.7%	1.4%	2.9%	43.2%	5.0%	17.3%	6.5%	22.3%	13.7%	6.4	1.8	
Number of public docks	0.0%	0.8%	2.5%	1.7%	51.7%	5.9%	16.9%	5.9%	14.4%	25.3%	6.1	1.6	
Quality of hiking trails	0.0%	0.0%	2.4%	8.4%	50.6%	8.4%	8.4%	6.0%	15.7%	44.7%	5.9	1.7	
Number of hiking trails	2.2%	0.0%	3.3%	4.4%	52.2%	7.8%	7.8%	8.9%	13.3%	42.3%	5.8	1.8	
Quality of public docks	0.0%	2.8%	2.8%	1.8%	58.7%	4.6%	8.3%	7.3%	13.8%	29.2%	5.8	1.7	
Number of campsites	0.8%	1.6%	1.6%	3.3%	67.2%	3.3%	4.9%	5.7%	11.5%	22.8%	5.6	1.6	
Number of boat launches	0.7%	1.5%	0.7%	4.4%	68.4%	7.4%	6.6%	2.9%	7.4%	15.5%	5.5	1.4	
Quality of picnic or day use areas	0.7%	2.9%	1.4%	5.7%	64.3%	6.4%	8.6%	3.6%	6.4%	11.4%	5.4	1.4	
Quality of boat launches	0.7%	1.5%	3.7%	4.5%	67.9%	6.0%	6.0%	3.0%	6.7%	15.7%	5.3	1.4	
Quality of on-line campground reservation system	2.0%	2.0%	0.0%	4.1%	75.5%	3.1%	4.1%	2.0%	7.1%	38.4%	5.3	1.4	
Quality of swim/sunbathing areas	2.7%	1.3%	6.7%	4.7%	58.7%	8.0%	7.3%	5.3%	5.3%	8.0%	5.3	1.6	
Quality of campsites	0.9%	2.6%	3.5%	3.5%	67.8%	8.7%	5.2%	3.5%	4.3%	26.3%	5.3	1.3	
Level of public recreation development	0.0%	2.0%	2.6%	3.3%	73.5%	8.6%	4.0%	1.3%	4.6%	4.4%	5.2	1.2	
Number of swim/sunbathing areas	1.9%	0.0%	5.6%	5.6%	66.9%	5.0%	7.5%	3.8%	3.8%	4.8%	5.2	1.4	
Number of picnic or day use areas	0.7%	0.7%	2.1%	7.8%	71.6%	6.4%	5.7%	1.4%	3.5%	12.4%	5.2	1.1	
Amount of shoreline available for use	3.2%	3.2%	2.6%	6.5%	65.8%	6.5%	5.2%	3.2%	3.9%	5.5%	5.1	1.5	
Cost to use facilities	8.4%	1.5%	6.9%	6.9%	71.8%	0.8%	0.8%	0.0%	3.1%	19.1%	4.6	1.5	

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Q11 Management unit level responses to the question

“Please indicate the extent that the following issues were problems for you during your visit today”

Table A-B.11 Management Unit B

	No Problem						Big Problem				DK	Mean	SD
Adequate protection from the wind	45.8%	6.5%	8.5%	11.1%	15.0%	3.9%	3.3%	3.3%	2.6%	7.3%	3.0	2.3	
Litter around the reservoir shoreline	50.6%	13.3%	8.2%	2.5%	11.4%	5.7%	5.1%	2.5%	0.6%	5.4%	2.6	2.2	
Adequate information/warnings provided	55.8%	8.8%	6.8%	6.1%	13.6%	3.4%	1.4%	2.0%	2.0%	8.7%	2.5	2.1	
Disruptive behavior by others	58.2%	8.9%	7.0%	4.4%	12.0%	1.9%	3.2%	1.9%	2.5%	3.1%	2.5	2.2	
Adequate safety and security	59.1%	8.4%	6.5%	5.2%	9.1%	3.2%	3.9%	3.9%	0.6%	5.5%	2.5	2.2	
Other	16.7%	0.0%	0.0%	0.0%	25.0%	0.0%	16.7%	0.0%	41.7%	20.0%	6.3	3.0	
(please specify): Refer to site-level surveys results tables													

Note: Response Scale: 1= No Problem, 9= Big Problem

Q12 Management unit level responses to the question

“Help us understand crowding issues by answering the following questions. (Mark one response for each item)”

Table A-B.12 Management Unit B

	Not at all Crowded						Extremely Crowded				DK/NA	Mean	SD
How <i>crowded</i> did you feel today?	45.1%	15.6%	8.7%	9.2%	2.9%	11.6%	2.9%	2.3%	1.7%	0.0%	2.8	2.2	
How crowded did you <u>expect</u> to feel today?	20.4%	12.0%	4.2%	19.2%	9.0%	20.4%	4.2%	6.0%	4.8%	2.3%	4.2	2.4	

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Q14 Management unit level responses to the question

“Please estimate how much money you and your party will spend TODAY while on this trip (e.g., fuel, lodging, restaurants, groceries, admissions, fees, outdoor gear, etc.)”

Table A-B.14 Current Day Trip Expenditure

	Current Day Trip Expenditure (\$)								Median	Mean	SD
	0	1-50	51-100	101-150	151-200	201-300	301-500	>500			
Management Unit B	2.5%	21.0%	18.5%	10.5%	10.5%	11.1%	11.7%	21.6%	150.0	330.0	518.4

Q16 Management unit level responses to the question

If you were on the water today, “what areas of the Priest Rapids/Wanapum reservoirs did you use today? (Mark all areas used)”

Table A-B.16 Percent response on used areas of the Priest Rapids/Wanapum Reservoirs

	% response on used areas of the Priest Rapids/Wanapum Reservoirs							N
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit F	Unit G	
Management Unit B	41.9%	87.1%	51.6%	3.2%	-	-	-	31

Q17.a Management unit level responses to the question

“Did you have to wait to use a boat launch today?”

Table A-B.17.a Response on having to wait to use boat launch

	Yes	No	N
Management Unit B	22.5%	77.5%	40

Q17.aa Wait time: Management unit level responses to the question

“How long did you wait to use a boat launch today?”

Table A-B.17.aa Current conditions on waiting times to use boat launch

	Wait Time (in minutes)						Min	Max	Mean	SD	N
	1	5	10	15	16	20					
Management Unit B	10.0%	40.0%	50.0%	0.0%	0.0%	0.0%	1	10	7.1	3.3	10

Q17.b Management unit level responses to the question

“How long of a wait to launch your boat is acceptable to you?”

Table A-B.1.7b Acceptability of waiting times to use boat launch (in minutes)

	Acceptable waiting times (in minutes)							Min	Max	Mean	SD	N
	0	1-5	6-10	11-15	16-20	21-25	>25					
Management Unit B	14.3%	22.9%	45.7%	14.3%	2.9%	0.0%	0.0%	0	20	8.31	5.1	35

Q18.a Management unit level responses to the question

Please rate each photo by indicating how acceptable you think “how many boats could use the segments of the reservoirs that you used today without you feeling too crowded and unsafe”. A rating of -4 means the number of boats is “very unacceptable”, and a rating of +4 means the number of boats is “very acceptable”.

Table A-B.18.a Management Unit B

	Mean	SD	N
Photo 1	3.4	1.6	31
Photo 2	3.7	0.8	30
Photo 3	3.6	0.9	30
Photo 4	3.1	1.5	30
Photo 5	2.4	1.9	31
Photo 6	1.6	2.5	31

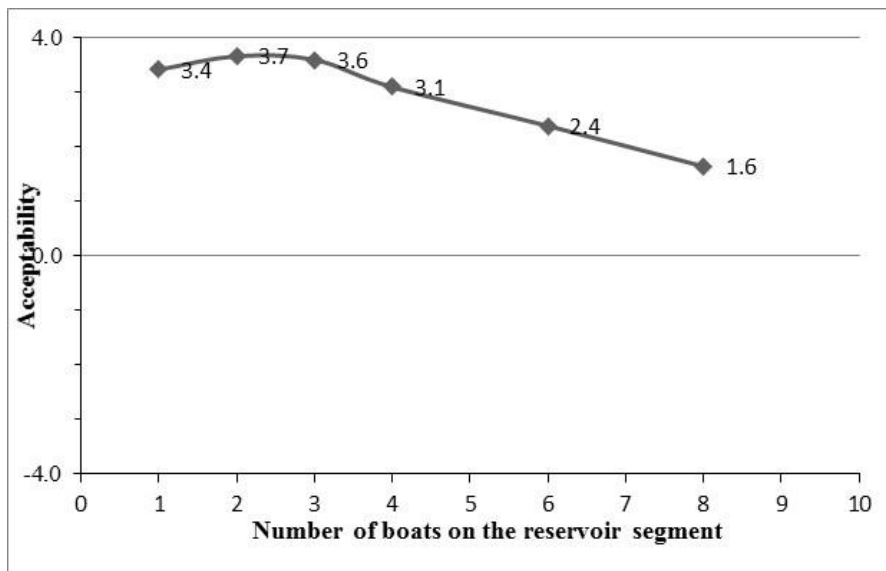


Figure A-B.18.a. Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at Management Unit B

Q18.b Management unit level responses to the question

“Which photo shows the highest number of boats that should be allowed on the reservoir segments you used today? In other words, at what point should boats be restricted from using the reservoir because it is too crowded and unsafe? (If you think use should not be restricted, please indicate)”

Table A-B.18.b Highest number of boats to be allowed on the reservoir segment

	Photo 1	Photo 2	Photo 3	Photo 4	Photo 5	Photo 6	Mean	SD	N
Management Unit B	-	13.3%	-	26.7%	40.0%	20.0%	4.5	1.2	15

Q18.bb Management unit level responses to the question

“None of the photos show a high enough number of boats to restrict use” (check box if you agree)

Table A-B.18.bb Agreement that none of the photos show a high enough number of boats to restrict use

	Yes	No	N
Management Unit B	55.6%	44.4%	27

Q18.c Management unit level responses to the question

“Which photo looks most like the number of boats you typically saw on the reservoir segments you used today?”

Table A-B.18.c Photo that reflects number of boats seen on the reservoir

	Photo 1	Photo 2	Photo 3	Photo 4	Photo 5	Photo 6	Mean	SD	N
Management Unit B	12.0%	16.0%	16.0%	40.0%	4.0%	12.0%	3.44	1.5	25

Management Unit C

Note: Management Unit C includes the following sites where surveys occurred:

1. Quilomene Dune and Bay
2. Rattlesnake Cove
3. Sunland Boat Launch
4. Sunland Picnic Area

Q1 Management unit level responses to the questions

“How many people are in your vehicle today, including yourself? (*mark all that apply*)”

Table A-C.1 Number of people in respondent’s vehicle

	Min	Max	Mean	SD	N
Management Unit C	1	15	5.0	2.9	154

Q3 Management unit level responses to the question

“Please indicate which of the following activities you are participating in on this trip”

Table A-C.3 Management Unit C

	Indicated Yes (% of sample)
Swimming/visiting the beach	90.3%
Boating	83.1%
Resting/relaxing	75.3%
Waterskiing/tubing/wakeboarding	54.9%
Wildlife Viewing	33.8%
Picnicking	31.2%
Riding jet skis/wave runners	24.7%
Camping	19.0%
Photography	18.2%
Golf	17.6%
Attending a concert	14.3%
Fishing	13.6%
Canoeing/kayaking/paddle boarding	10.5%
Hiking	8.5%
Visiting a dam	3.9%
Other	5.3%
<i>Other Text: Refer to site-level surveys results tables</i>	

Q7 Management unit level responses to the questions

“How much time will you spend on your current trip?”

Table A-C.7 Time spent in hours on current trip

	< 1 hr	1-4 hrs	5-8hrs	> 8 hrs	Total	Median	Mean	N
Management Unit C	0.0%	36.8%	56.1	7.0%	100%	5.0	5.7	57

Table A-C.7.a Time spent in days on current trip

	1-2days	3-4days	5-7days	>1 week	Total	Median	Mean	N
Management Unit C	24.4%	34.4%	24.4%	16.7%	100%	4.0	7.1	90

Q8 Management unit level responses to the questions

“If your current trip extends into two or more days, what type of overnight accommodations did you use on your trip?”

Table A-C.8 Management Unit C

	Yes
Campground (RV or tent)	19.8%
<i>Location: Refer to site-level surveys results tables</i>	
Rented cabin/condo/home/motel/hotel	20.1%
<i>Location: Refer to site-level surveys results tables</i>	
Your own home/property	54.0%
Other (<i>Please specify</i>):	5.2%
<i>Other Text: Refer to site-level surveys results tables</i>	

Q9 Management unit level responses to the question

“Did any of the following conditions adversely affect your trip?”

Table A-C.9 Management Unit C

	Yes
Strong winds	60.6%
Lack of shade from the sun	28.8%
Low water levels	27.3%
Lack of shelter from the weather	4.6%
Lack of ADA accessibility	3.1%

Q10 Management unit level responses to the question

“Grant PUD is interested in your opinion about the level of existing development and management at the reservoirs. Please indicate a response for **any** of the following facilities you used during your visit.”

Table A-C.10 Management Unit C

	Too high			About right				Too Low		DK
	1	2	3	4	5	6	7	8	9	
Number of public docks	2.6%	1.7%	0.9%	1.7%	40.0%	3.5%	9.6%	9.6%	30.4%	0.2%
Number of restrooms/toilets	2.3%	0.0%	0.0%	0.8%	48.9%	7.6%	6.9%	4.6%	29.0%	0.1%
Quality of public docks	3.6%	0.0%	2.7%	4.5%	45.5%	2.7%	8.9%	7.1%	25.0%	0.2%
Quality of restrooms/toilets	4.2%	0.0%	1.7%	2.5%	54.2%	5.1%	7.6%	2.5%	22.0%	0.2%
Quality of hiking trails	4.6%	2.3%	0.0%	2.3%	57.5%	5.7%	4.6%	3.4%	19.5%	0.4%
Amount of shoreline available for use	3.6%	1.4%	2.9%	3.6%	57.2%	2.9%	9.4%	2.2%	16.7%	0.0%
Number of campsites	3.0%	0.0%	5.1%	3.0%	60.6%	2.0%	4.0%	5.1%	17.2%	0.3%
Number of boat launches	3.0%	0.8%	2.3%	2.3%	61.7%	1.5%	7.5%	5.3%	15.8%	0.1%
Number of picnic or day use areas	4.1%	0.8%	4.1%	6.5%	55.3%	4.9%	3.3%	4.1%	17.1%	0.1%
Quality of boat launches	3.0%	3.0%	2.3%	6.0%	55.6%	3.0%	6.0%	5.3%	15.8%	0.1%
Number of hiking trails	7.9%	2.2%	3.4%	1.1%	50.6%	6.7%	11.2%	0.0%	16.9%	0.4%
Number of swim/sunbathing areas	3.7%	2.2%	3.0%	2.2%	60.0%	5.9%	12.6%	5.2%	5.2%	0.0%
Quality of on-line campground reservation system	4.5%	0.0%	1.5%	1.5%	71.6%	4.5%	9.0%	3.0%	4.5%	0.5%
Quality of swim/sunbathing areas	3.8%	0.8%	4.5%	3.0%	63.9%	3.8%	8.3%	5.3%	6.8%	0.0%
Quality of campsites	4.4%	1.1%	6.6%	2.2%	65.9%	1.1%	3.3%	4.4%	11.0%	0.3%
Quality of picnic or day use areas	4.1%	2.5%	4.1%	8.2%	59.8%	4.1%	5.7%	0.0%	11.5%	0.1%
Level of public recreation development	6.3%	1.6%	0.8%	3.1%	66.9%	5.5%	3.9%	1.6%	10.2%	0.1%
Cost to use facilities	11.2%	0.9%	4.7%	5.6%	70.1%	1.9%	0.9%	0.9%	3.7%	0.2%

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Q11 Management unit level responses to the question

“Please indicate the extent that the following issues were problems for you during your visit today”

Table A-C.11 Management Unit C

	No Problem						Big problem			DK
Adequate protection from the wind	45.0%	6.1%	9.9%	7.6%	17.6%	3.8%	6.9%	0.8%	2.3%	7.1%
Adequate information/warnings provided	53.4%	7.6%	8.4%	4.6%	10.7%	3.1%	6.9%	0.8%	4.6%	6.4%
Litter around the reservoir shoreline	55.7%	10.7%	7.9%	5.0%	5.7%	3.6%	3.6%	2.1%	5.7%	1.4%
Disruptive behavior by others	60.7%	9.3%	5.7%	5.7%	8.6%	2.1%	2.9%	2.1%	2.9%	2.1%
Adequate safety and security	65.7%	10.2%	9.5%	5.8%	3.6%	0.7%	2.2%	0.7%	1.5%	5.5%
Other (please specify): Refer to site-level surveys results table	71.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.6%	41.7%

Note: Response Scale: 1= No Problem, 9= Big Problem

Q12 Management unit level responses to the question

“Help us understand crowding issues by answering the following questions. (Mark one response for each item)”

Table A-C.12 Management Unit C

	Not at all Crowded						Extremely Crowded			DK/N
How <i>crowded</i> did you feel today?	43.2%	19.6%	8.8%	14.2%	2.0%	7.4%	2.0%	1.4%	1.4%	1.3%
How crowded did you <u>expect</u> to feel today?	22.6%	8.2%	9.6%	15.1%	6.2%	21.9%	4.1%	6.2%	6.2%	2.0%

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Q14 Management unit level responses to the question

“Please estimate how much money you and your party will spend TODAY while on this trip (e.g., fuel, lodging, restaurants, groceries, admissions, fees, outdoor gear, etc.)”

Table A-C.14 Current Day Trip Expenditure

	Current Day Trip Expenditure (\$)								
	0	1-50	51-100	101-150	151-200	201-300	301-500	>500	Median
Management Unit C	2.7	19.2	22.6	7.5	12.3	8.9	15.1	11.6	150

Q16 Management unit level responses to the question

If you were on the water today, “what areas of the Priest Rapids/Wanapum reservoirs did you use today? (Mark all areas used)”

Table A-C.16 Percent response on used areas of the Priest Rapids/Wanapum Reservoirs

	% response on used areas of the Priest Rapids/Wanapum Reservoirs						
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit F	U
Management Unit C	12.5%	46.2%	84.6%	23.1%	7.7%	1.9%	2

Q17.a Management unit level responses to the question
 “Did you have to wait to use a boat launch today?”

Table A-C.17.a Response on having to wait to use boat launch

	Yes	No	N
Management Unit C	21.9%	78.1%	105

Q17.aa Wait time: Management unit level responses to the question
 “How long did you wait to use a boat launch today?”

Table A-C.17aa Current conditions on waiting times to use boat launch

	Wait Time (in minutes)						Mean	SD	Min
	1	5	10	15	16	20			
Management Unit C	0.0%	26.1%	56.5%	56.5%	4.3%	13.0%	10.3	47	5

Q17.b Management unit level responses to the question
 “How long of a wait to launch your boat is acceptable to you?”

Table A-C.17.b Acceptability of waiting times to use boat launch (in minutes)

	Acceptable waiting times (in minutes)							Min	Max	Mean
	0	1-5	6-10	11-15	16-20	21-25	>25			
Management Unit C	10.5%	16.3%	33.7%	24.4%	7.0%	1.2%	7.0%	0	120	13.3

Q18.a Management unit level responses to the question

Please rate each photo by indicating how acceptable you think “how many boats could use the segments of the reservoirs that you used today without you feeling too crowded and unsafe”. A rating of -4 means the number of boats is “very unacceptable”, and a rating of +4 means the number of boats is “very acceptable”.

Table A-C.18.a Management Unit C

	Mean	SD	N
Photo 1	3.5	1.3	91
Photo 2	3.5	1.4	91
Photo 3	3.3	1.4	90
Photo 4	3.2	1.6	88
Photo 5	2.6	2.1	93
Photo 6	2.2	2.5	92

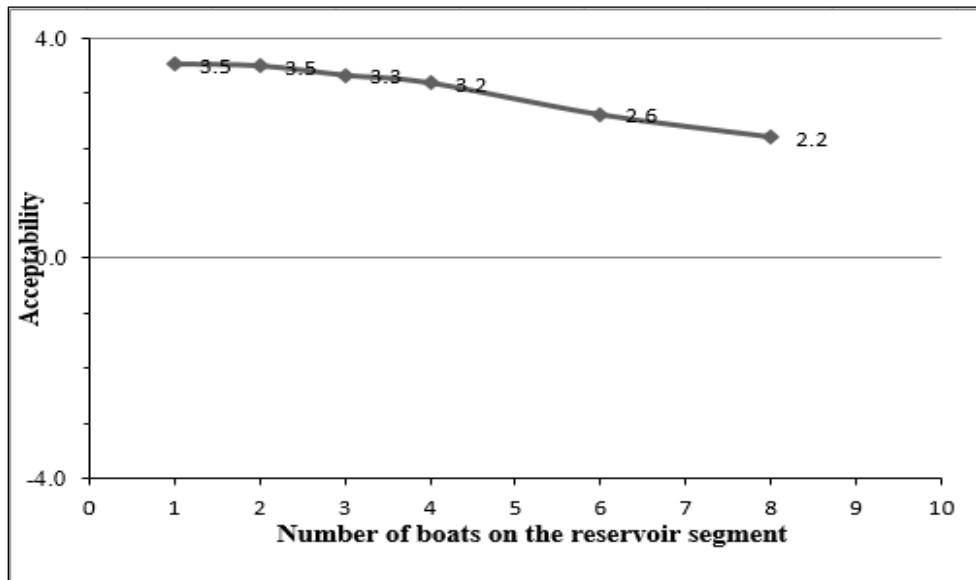


Figure A-C.18.a. Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at Management Unit C

Q18.b Management unit level responses to the question

“Which photo shows the highest number of boats that should be allowed on the reservoir segments you used today? In other words, at what point should boats be restricted from using the reservoir because it is too crowded and unsafe? (If you think use should not be restricted, please indicate)”

Table A-C.18.b Highest number of boats to be allowed on the reservoir segment

	Photo 1	Photo 2	Photo 3	Photo 4	Photo 5	Photo 6	Mean	SD	N
Management Unit C	-	-	12.0%	16.0%	20.0%	52.0%	5.1	1.1	25

Q18.bb Management unit level responses to the question

“None of the photos show a high enough number of boats to restrict use” (check box if you agree)

Table A-C.18bb. Agreement that none of the photos show a high enough number of boats to restrict use

	Yes	No	N
Management Unit C	71.3%	28.7%	87

Q18.c Management unit level responses to the question

“Which photo looks most like the number of boats you typically saw on the reservoir segments you used today?”

Table A-C.18.c Photo that reflects number of boats seen on the reservoir

	Photo 1	Photo 2	Photo 3	Photo 4	Photo 5	Photo 6	Mean	SD	N
Management Unit C	6.5%	13.0%	14.3%	11.7%	16.9%	37.7%	4.3	1.7	77

Management Unit D

Note: Management Unit D includes the following sites where surveys occurred:

1. Frenchman Coulee Recreation Area
2. Riverstone Resort
3. Rocky Coulee
4. Vantage Boat Launch

Q1 Management unit level responses to the questions

“How many people are in your vehicle today, including yourself? (*mark all that apply*)”

Table A-D.1 Number of people in respondent’s vehicle

	Min	Max	Mean	SD	N
Management Unit D	1	11	2.6	1.7	164

Q3 Management unit level responses to the question

“Please indicate which of the following activities you are participating in on this trip”

Table A-D.3 Management Unit D

	Indicated Yes (% of sample)
Swimming/visiting the beach	59.1%
Resting/relaxing	56.7%
Wildlife Viewing	24.4%
Picnicking	23.8%
Photography	22.0%
Boating	19.5%
Camping	17.7%
Hiking	17.1%
Waterskiing/tubing/wakeboarding	9.1%
Fishing	8.5%
Attending a concert	6.1%
Riding jet skis/wave runners	5.5%
Canoeing/kayaking/paddle boarding	3.0%
Visiting a dam	2.4%
Golf	0.6%
Other	19.0%
Other Text: <i>Refer to site-level surveys results tables</i>	

Q7 Management unit level responses to the questions

“How much time will you spend on your current trip?”

Table A-D.7 Time spent in hours on current trip

	< 1 hr	1-4 hrs	5-8hrs	> 8 hrs	Median	Mean	N
Management Unit D	6.8%	69.2	21.4%	2.6%	2.0	3.2	117

Table A-D.7.a Time spent in days on current trip

	1-2 days	3-4 days	5-7 days	>1 week	Median	Mean	N
Management Unit D	49.0%	24.5%	12.2%	14.3%	3.0	5.7	116

Q8 Management unit level responses to the questions

“If your current trip extends into two or more days, what type of overnight accommodations did you use on your trip?”

Table A-D.8 Management Unit D

	Yes
Campground (RV or tent)	48.7%
<i>Location: Refer to site-level surveys results tables</i>	
Rented cabin/condo/home/motel/hotel	28.9%
<i>Location: Refer to site-level surveys results tables</i>	
Your own home/property	17.1%
Other (<i>Please specify</i>):	13.2%
<i>Other Text: Refer to site-level surveys results tables</i>	

Q9 Management unit level responses to the question

“Did any of the following conditions adversely affect your trip?”

Table A-D.9 Management Unit D

	Yes
Strong winds	52.6%
Lack of shade from the sun	50.0%
Low water levels	9.2%
Lack of shelter from the weather	6.6%
Lack of ADA accessibility	1.3%

Q10 Management unit level responses to the question

“Grant PUD is interested in your opinion about the level of existing development and management at the reservoirs. Please indicate a response for any of the following facilities you used during your visit.”

Table A-D.10 Management Unit D

	Too High		About Right					Too Low		DK	Mean	SD
	1	2	3	4	5	6	7	8	9			
Number of swim/sunbathing areas	0.0%	0.9%	0.9%	5.2%	53.4%	8.6%	18.1%	6.9%	6.0%	0.2%	5.8	1.4
Amount of shoreline available for use	0.0%	1.6%	4.8%	5.6%	54.0%	8.1%	12.1%	7.3%	6.5%	0.1%	5.6	1.5
Number of campsites	1.2%	1.2%	0.0%	4.8%	67.5%	7.2%	8.4%	2.4%	7.2%	0.4%	5.5	1.4
Quality of swim/sunbathing areas	0.9%	1.8%	2.7%	4.5%	62.2%	10.8%	9.9%	1.8%	5.4%	0.2%	5.4	1.4
Number of hiking trails	0.0%	1.1%	3.3%	5.5%	64.8%	9.9%	6.6%	1.1%	7.7%	0.3%	5.4	1.4
Number of restrooms/toilets	0.0%	1.3%	0.7%	2.0%	78.5%	4.0%	9.4%	1.3%	2.7%	0.0%	5.3	1.0
Quality of on-line campground reservation system	0.0%	0.0%	1.7%	6.8%	78.0%	5.1%	1.7%	0.0%	6.8%	0.5%	5.3	1.1
Number of picnic or day use areas	0.8%	2.4%	3.2%	2.4%	72.0%	8.0%	8.0%	2.4%	0.8%	0.1%	5.2	1.1
Number of public docks	0.0%	2.1%	1.0%	7.2%	72.2%	5.2%	6.2%	4.1%	2.1%	0.3%	5.2	1.1
Quality of campsites	3.7%	1.2%	0.0%	3.7%	72.8%	7.4%	4.9%	1.2%	4.9%	0.4%	5.2	1.4
Quality of hiking trails	2.4%	2.4%	1.2%	9.5%	59.5%	14.3%	4.8%	0.0%	6.0%	0.4%	5.2	1.4
Number of boat launches	0.0%	1.0%	3.9%	3.9%	82.4%	2.0%	2.9%	0.0%	3.9%	0.2%	5.1	1.0
Quality of picnic or day use areas	1.6%	1.6%	4.9%	4.9%	71.5%	6.5%	6.5%	1.6%	0.8%	0.1%	5.0	1.1
Quality of public docks	1.0%	2.1%	3.1%	9.3%	74.2%	3.1%	1.0%	2.1%	4.1%	0.3%	5.0	1.2
Quality of restrooms/toilets	2.3%	2.3%	5.4%	3.1%	75.2%	0.8%	5.4%	3.1%	2.3%	0.1%	5.0	1.3
Level of public recreation development	2.9%	1.5%	1.5%	7.3%	80.3%	2.2%	2.2%	0.0%	2.2%	0.1%	4.9	1.1
Cost to use facilities	5.3%	2.1%	2.1%	4.3%	85.1%	0.0%	0.0%	0.0%	1.1%	0.3%	4.7	1.1
Quality of boat launches	2.0%	8.0%	10.0%	7.0%	68.0%	1.0%	2.0%	0.0%	2.0%	0.3%	4.5	1.3

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Q11 Management unit level responses to the question

“Please indicate the extent that the following issues were problems for you during your visit today”

Table A-D.11 Management Unit D

	No Problem							Big problem		Mean	SD	DK
Adequate protection from the wind	56%	6.7%	4.5%	9.7%	8.2%	6.0%	4.5%	2.2%	2.2%	2.7	2.3	8.2%
Adequate information/warnings provided	76.1%	9.0%	4.5%	1.5%	4.5%	1.5%	2.2%	0.0%	0.7%	1.7	1.5	8.8%
Litter around the reservoir shoreline	77.5%	9.9%	3.5%	2.1%	2.1%	3.5%	0.7%	0.7%	0.0%	1.6	1.4	6.0%
Disruptive behavior by others	87.6%	7.0%	1.6%	0.8%	1.6%	0.8%	0.8%	0.0%	0.0%	1.3	0.9	11.6%
Adequate safety and security	85.9%	8.9%	0.7%	2.2%	1.5%	0.0%	0.7%	0.0%	0.0%	1.3	0.9	8.2%
Other	76.9%	15.4%	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4	0.9	27.8%
<i>(please specify): Refer to site-level surveys results tables</i>												

Note: Response Scale: 1= No Problem, 9= Big Problem

Q12 Management unit level responses to the question

“Help us understand crowding issues by answering the following questions. *(Mark one response for each item)*”

Table A-D.12 Management Unit D

	Not at all Crowded							Extremely Crowded		DK/NA	Mean	SD
How <i>crowded</i> did you feel today?	69.6%	16.2%	8.1%	4.1%	0.0%	2.0%	0.0%	0.0%	0.0%	2.0%	1.5	1.0
How crowded did you <u>expect</u> to feel today?	33.1%	16.2%	8.8%	15.4%	7.4%	14.0%	3.7%	1.5%	0.0%	5.6%	3.1	2.0

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Q14 Management unit level responses to the question

“Please estimate how much money you and your party will spend TODAY while on this trip (e.g., fuel, lodging, restaurants, groceries, admissions, fees, outdoor gear, etc.)”

Table A-D.14 Current Day Trip Expenditure

	Current Day Trip Expenditure (\$)								Median	Mean	SD
	0	1-50	51-100	101-150	151-200	201-300	301-500	>500			
Management Unit D	8.6%	42.9%	20%	5.7%	9.3%	6.43%	3.6%	21.6%	50.0	143.4	284.9

Q16 Management unit level responses to the question

If you were on the water today, “what areas of the Priest Rapids/Wanapum reservoirs did you use today? (Mark all areas used)”

Table A-D.16 Percent response on used areas of the Priest Rapids/Wanapum Reservoirs

	% response on used areas of the Priest Rapids/Wanapum Reservoirs							N
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit F	Unit G	
Management Unit D	-	18.2%	50.0%	72.7%	45.5%	-	-	22

Q17.a Management unit level responses to the question

“Did you have to wait to use a boat launch today?”

Table A-D.17.a Response on having to wait to use boat launch

	Yes	No	N
Management Unit D	11.8%	88.2%	34

Q17.aa Wait time: Management unit level responses to the question

“How long did you wait to use a boat launch today?”

Table A-D.17.aa Current conditions on waiting times to use boat launch

	Wait Time (in minutes)							Min	Max	Mean	SD	N
	1	5	10	15	16	20						
Management Unit D	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0	5	5	5	3	

Q17.b Management unit level responses to the question

“How long of a wait to launch your boat is acceptable to you?”

Table A-D.17.b Acceptability of waiting times to use boat launch (in minutes)

	Acceptable waiting times (in minutes)							Min	Max	Mean	SD	N
	0	1-5	6-10	11-15	16-20	21-25	>25					
Management Unit D	22.7%	27.3%	27.3%	13.6%	9.1%	0.0%	0.0%	0	20	7.9	6.3	22

Q18.a Management unit level responses to the question

Please rate each photo by indicating how acceptable you think “how many boats could use the segments of the reservoirs that you used today without you feeling too crowded and unsafe”. A rating of -4 means the number of boats is “very unacceptable”, and a rating of +4 means the number of boats is “very acceptable”.

Table A-D.18.a Management Unit D

	Mean	SD	N
Photo 1	3.3	1.9	24
Photo 2	3.4	1.7	24
Photo 3	3.2	1.8	23
Photo 4	3.0	2.0	23
Photo 5	2.3	2.2	23
Photo 6	2.0	2.6	23

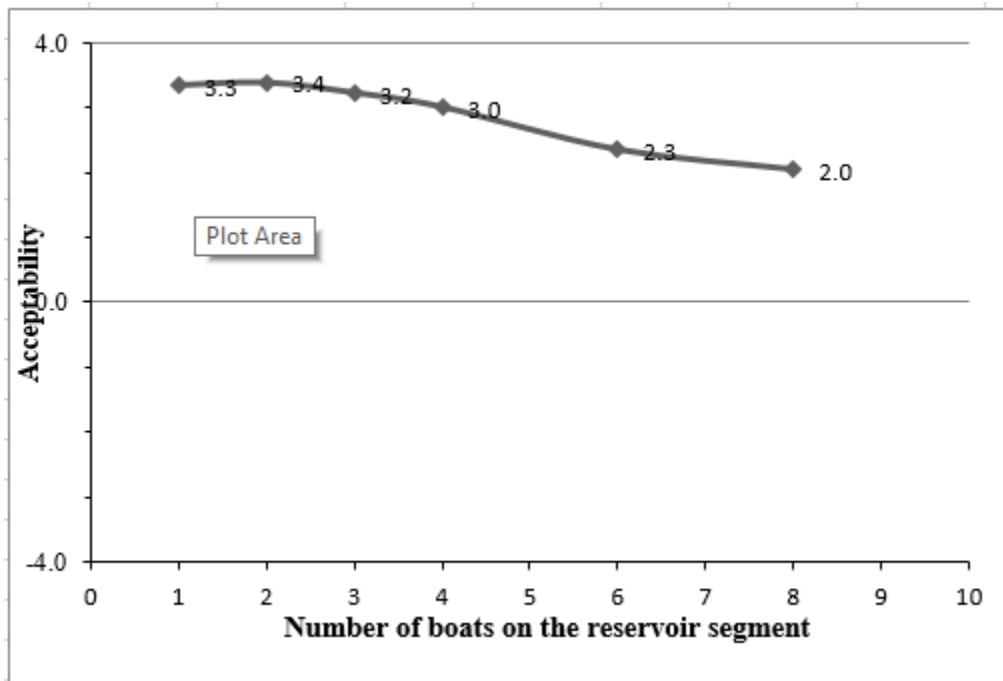


Figure A-D.18.a Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at Management Unit D

Q18.b Management unit level responses to the question

“Which photo shows the highest number of boats that should be allowed on the reservoir segments you used today? In other words, at what point should boats be restricted from using the reservoir because it is too crowded and unsafe? (If you think use should not be restricted, please indicate)”

Table A-D.18.b Highest number of boats to be allowed on the reservoir segment

	Photo 1	Photo 2	Photo 3	Photo 4	Photo 5	Photo 6	Mean	SD	N
Management Unit D	12.5%	25.0%	12.5%	-	25.0%	25.0%	3.8	2.0	8

Table 1.18.bb Management unit level responses to the question

“None of the photos show a high enough number of boats to restrict use” (check box if you agree)

Table A-D.18.bb Agreement that none of the photos show a high enough number of boats to restrict use

	Yes	No	N
Management Unit D	57.9%	42.1%	19

Q18.c Management unit level responses to the question

“Which photo looks most like the number of boats you typically saw on the reservoir segments you used today?”

Table A-D.18.c Photo that reflects number of boats seen on the reservoir

	Photo 1	Photo 2	Photo 3	Photo 4	Photo 5	Photo 6	Mean	SD	N
Management Unit D	33.3%	26.7%	13.3%	13.3%	-	13.3%	2.6	1.7	77

Management Unit E

Note: Management Unit E includes the following sites where surveys occurred:

1. Sand Hollow
2. The Cove
3. Wanapum Dam Overlook
4. Wanapum Dam Upper Boat Launch
5. Wanapum Recreation Area (WSP)
6. Huntzinger Fishing Pier

Q1 Management unit level responses to the questions

“How many people are in your vehicle today, including yourself? (*mark all that apply*)”

Table A-E.1 Number of people in respondent’s vehicle

	Min	Max	Mean	SD	N
Management Unit E	1	12	3.5	2.1	124

Q3 Management unit level responses to the question

“Please indicate which of the following activities you are participating in on this trip”

Table A-E.3 Management Unit E

	Indicated Yes (% of sample)
Resting/relaxing	62.9%
Swimming/visiting the beach	62.1%
Camping	37.1%
Picnicking	33.9%
Boating	24.2%
Photography	21.0%
Attending a concert	16.9%
Wildlife Viewing	16.1%
Waterskiing/tubing/wakeboarding	15.3%
Hiking	14.5%
Other	13.8%
Riding jet skis/wave runners	8.9%
Fishing	7.3%
Visiting a dam	6.5%
Golf	1.6%
Canoeing/kayaking/paddle boarding	1.6%
<i>Other Text: Refer to site-level surveys results tables</i>	

Q7 Management unit level responses to the questions

“How much time will you spend on your current trip?”

Table A.E.7 Time spent in hours on current trip

	< 1 hr	1-4 hrs	5-8hrs	> 8 hrs	Median	Mean	N
Management Unit E	7.7%	53.8%	32.3%	6.2%	4.0	4.1	65

Table A.E.7.a Time spent in days on current trip

	1-2 days	3-4 days	5-7 days	>1 week	Median	Mean	N
Management Unit E	38.3%	48.3%	11.7%	1.7%	3.0	4.9	60

Q8 Management unit level responses to the questions

“If your current trip extends into two or more days, what type of overnight accommodations did you use on your trip?”

Table A.E.8 Management Unit E

	Yes
Campground (RV or tent)	76.6%
<i>Location: Refer to site-level surveys results tables</i>	
Rented cabin/condo/home/motel/hotel	1.3%
<i>Location: Refer to site-level surveys results tables</i>	
Your own home/property	5.2%
Other (<i>Please specify</i>):	9.1%
<i>Other Text: Refer to site-level surveys results tables</i>	

Q9 Management unit level responses to the question

“Did any of the following conditions adversely affect your trip?”

Table A.E.9 Management Unit E

	Yes
Strong winds	65.2%
Lack of shade from the sun	33.3%
Low water levels	18.2%
Lack of shelter from the weather	9.1%
Lack of ADA accessibility	3.0%

Q10 Management unit level responses to the question

“Grant PUD is interested in your opinion about the level of existing development and management at the reservoirs. Please indicate a response for **any** of the following facilities you used during your visit.”

Table A.E.10 Management Unit E

	Too High		About Right					Too Low		DK	Mean	SD
	1	2	3	4	5	6	7	8	9			
Number of boat launches	0.0%	0.0%	4.1%	4.1%	73.0%	2.7%	8.1%	2.7%	5.4%	0.3%	5.4	1.2
Amount of shoreline available for use	1.0%	0.0%	6.7%	7.7%	55.8%	8.7%	11.5%	2.9%	5.8%	0.1%	5.4	1.5
Quality of public docks	0.0%	0.0%	6.8%	1.7%	72.9%	3.4%	10.2%	0.0%	5.1%	0.4%	5.3	1.2
Number of swim/sunbathing areas	0.0%	2.1%	5.3%	4.3%	66.0%	8.5%	8.5%	0.0%	5.3%	0.1%	5.3	1.3
Quality of swim/sunbathing areas	0.0%	1.1%	5.4%	5.4%	67.7%	6.5%	6.5%	2.2%	5.4%	0.1%	5.3	1.3
Quality of restrooms/toilets	0.9%	1.8%	7.3%	8.2%	59.1%	7.3%	7.3%	1.8%	6.4%	0.1%	5.2	1.5
Number of restrooms/toilets	0.9%	0.9%	1.8%	1.8%	86.6%	1.8%	4.5%	0.0%	1.8%	0.0%	5.1	0.9
Level of public recreation development	3.1%	0.0%	2.1%	3.1%	83.5%	2.1%	3.1%	0.0%	3.1%	0.1%	5.0	1.1
Quality of boat launches	0.0%	0.0%	8.1%	5.4%	77.0%	2.7%	2.7%	0.0%	4.1%	0.3%	5.0	1.1
Quality of campsites	1.2%	3.7%	3.7%	6.1%	72.0%	6.1%	4.9%	0.0%	2.4%	0.2%	5.0	1.2
Quality of on-line campground reservation system	1.6%	1.6%	6.5%	8.1%	72.6%	3.2%	1.6%	0.0%	4.8%	0.4%	4.9	1.3
Number of picnic or day use areas	2.7%	0.0%	9.1%	3.6%	75.5%	4.5%	1.8%	1.8%	0.9%	0.0%	4.8	1.1
Quality of picnic or day use areas	1.9%	2.9%	7.6%	8.6%	69.5%	4.8%	1.9%	1.0%	1.9%	0.0%	4.8	1.2
Cost to use facilities	4.2%	3.2%	7.4%	5.3%	73.7%	1.1%	1.1%	1.1%	3.2%	0.1%	4.7	1.4

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Q11 Management unit level responses to the question

“Please indicate the extent that the following issues were problems for you during your visit today”

Table A.E.11 Management Unit E

	No Problem						Big Problem				DK	Mean	SD	N
Adequate protection from the wind	58.5%	5.7%	9.4%	2.8%	7.5%	0.9%	4.7%	2.8%	7.5%	5.4%	2.8	2.7	112	
Disruptive behavior by others	76.6%	4.7%	3.7%	0.9%	4.7%	0.9%	3.7%	1.9%	2.8%	6.1%	2.0	2.1	114	
Adequate information/warnings provided	72.6%	9.4%	5.7%	1.9%	4.7%	1.9%	2.8%	0.0%	0.9%	6.2%	1.8	1.7	113	
Litter around the reservoir shoreline	75.5%	9.1%	4.5%	0.9%	1.8%	3.6%	4.5%	0.0%	0.0%	4.3%	1.7	1.6	115	
Adequate safety and security	79.6%	7.4%	4.6%	0.9%	0.0%	3.7%	0.9%	0.0%	2.8%	5.3%	1.7	1.7	114	
Other	28.6%	28.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	42.9%	22.2%	4.7	4.3	9	
(please specify): Refer to site-level surveys results tables														

Note: Response Scale: 1= No Problem, 9= Big Problem

Q12 Management unit level responses to the question

“Help us understand crowding issues by answering the following questions. *(Mark one response for each item)*”

Table A.E.12 Management Unit E

	Not at all Crowded						Extremely Crowded				DK/NA	Mean	SD
How <i>crowded</i> did you feel today?	63.8%	9.5%	1.7%	12.1%	3.4%	0.9%	6.0%	3.4%	0.0%	0.0%	2.1	1.8	
How crowded did you <u>expect</u> to feel today?	37.2%	8.8%	9.7%	22.1%	3.5%	1.7%	10.6%	5.3%	1.8%	0.9%	3.1	2.1	

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Q14 Management unit level responses to the question

“Please estimate how much money you and your party will spend TODAY while on this trip (e.g., fuel, lodging, restaurants, groceries, admissions, fees, outdoor gear, etc.)”

Table A.E.14 Current Day Trip Expenditure

	Current Day Trip Expenditure (\$)								Median	Mean	SD
	0	1-50	51-100	101-150	151-200	201-300	301-500	>500			
Management Unit E	4.7%	28.3%	25.5%	9.4%	11.3%	10.4%	7.5%	2.8%	100	168	239.9

Q16 Management unit level responses to the question

If you were on the water today, “what areas of the Priest Rapids/Wanapum reservoirs did you use today? (Mark all areas used)”

Table A.E.16 Percent response on used areas of the Priest Rapids/Wanapum Reservoirs

	% response on used areas of the Priest Rapids/Wanapum Reservoirs								N
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit F	Unit G		
Management Unit E	5.0%	5.0%	5.0%	15.0%	90.0%	5.0%	-		31

Q17.a Management unit level responses to the question

“Did you have to wait to use a boat launch today?”

Table A.E.17.a Response on having to wait to use boat launch

	Yes	No	N
Management Unit E	3.2%	96.8%	31

Q17.aa Wait time: Management unit level responses to the question

“How long did you wait to use a boat launch today?”

Table A.E.17.aa Current conditions on waiting times to use boat launch

	Wait Time (in minutes)										
	1	5	10	15	16	20	Min	Max	Mean	SD	N
Management Unit E	0.0%	50.0%	0.0%	50.0%	0.0%	0.0%	5	15	10	7.1	2

Q17b Management unit level responses to the question

“How long of a wait to launch your boat is acceptable to you?”

Table A.E.17.b Acceptability of waiting times to use boat launch (in minutes)

	0	1-5	6-10	11-15	16-20	21-25	>25	Min	Max	Mean	SD	N
Management Unit E	9.5%	23.8%	23.8%	19.0%	14.3%	0.0%	9.5%	0	30	11.9	8.5	86

Q18.a Management unit level responses to the question

Please rate each photo by indicating how acceptable you think “how many boats could use the segments of the reservoirs that you used today without you feeling too crowded and unsafe”. A rating of -4 means the number of boats is “very unacceptable”, and a rating of +4 means the number of boats is “very acceptable”.

Table A.E.18.a Management Unit E

	Mean	SD	N
Photo 1	2.6	2.2	17
Photo 2	2.5	2.3	16
Photo 3	2.4	2.3	16
Photo 4	2.2	2.3	16
Photo 5	1.6	2.3	17
Photo 6	1.1	2.5	17

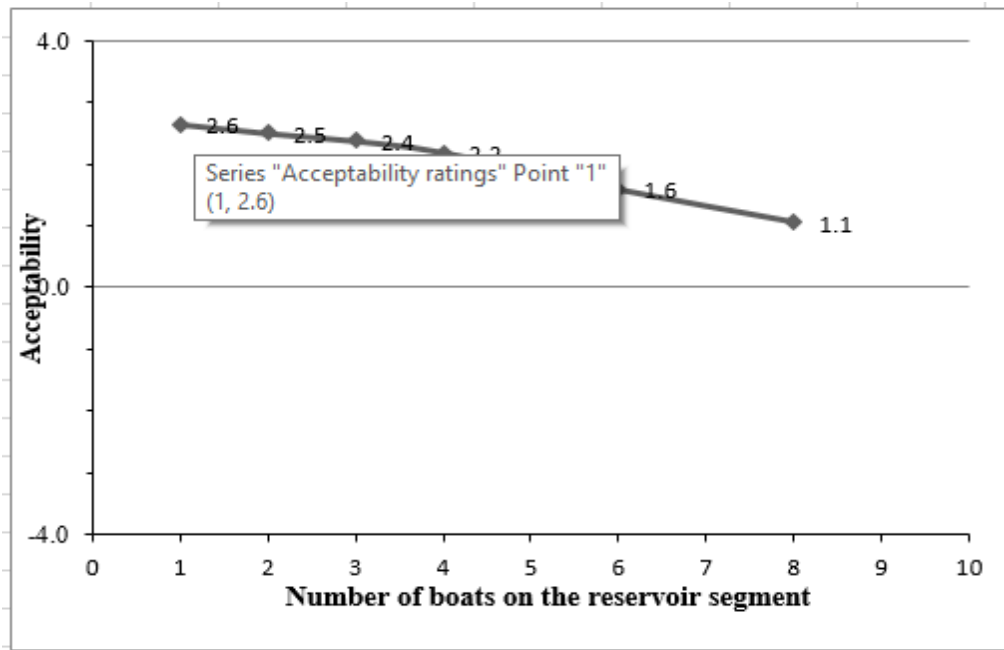


Figure A.E.18.a Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at Management Unit E

Q18.b Management unit level responses to the question

“Which photo shows the highest number of boats that should be allowed on the reservoir segments you used today? In other words, at what point should boats be restricted from using the reservoir because it is too crowded and unsafe? (If you think use should not be restricted, please indicate)”

Table A.E.18.b Highest number of boats to be allowed on the reservoir segment

	Photo 1	Photo 2	Photo 3	Photo 4	Photo 5	Photo 6	Mean	SD	N
Management Unit E	-	14.3%	14.3%	-	-	71.4%	5.0	1.7	7

Q18.bb Management unit level responses to the question

“None of the photos show a high enough number of boats to restrict use” (check box if you agree)

Table A.E.18.bb Agreement that none of the photos show a high enough number of boats to restrict use

	Yes	No	N
Management Unit E	75.0%	25.0%	19

Q18.c Management unit level responses to the question

“Which photo looks most like the number of boats you typically saw on the reservoir segments you used today?”

Table A.E.18.c Photo that reflects number of boats seen on the reservoir

	Photo 1	Photo 2	Photo 3	Photo 4	Photo 5	Photo 6	Mean	SD	N
Management Unit E	36.4%	-	27.3%	18.2%	0	18.2%	3.0	1.9	11

Management Unit F

Note: Management Unit F includes the following sites where surveys occurred:

1. Beverly Sand Dunes ORV Park
2. Burkett Lake Recreation Area
3. Huntzinger Road Boat Launch
4. Wanapum Dam Lower Boat Launch
5. Wanapum Turbine Park

Q1 Management unit level responses to the questions

“How many people are in your vehicle today, including yourself? (*mark all that apply*)”

Table A-F.1 Number of people in respondent’s vehicle

	Min	Max	Mean	SD	N
Management Unit F	1	6	2.4	1.1	50

Q3 Management unit level responses to the question

“Please indicate which of the following activities you are participating in on this trip”

Table A.E.3 Management Unit F

	Indicated Yes (% of sample)
Fishing	59.2%
Resting	34.7%
Wildlife	18.4%
Boating	12.2%
Dam	10.2%
Swimming	8.2%
Photography	8.2%
Camping	8.2%
Picnicking	6.1%
Hiking	6.1%
Canoeing	2.0%
Jetskis	0.0%
Concert	0.0%
Waterskiing	0.0%
Golf	0.0%
Other	18.4%
<i>Other Text: Refer to site-level surveys results tables</i>	

Q7.a Management unit level responses to the questions

“How much time will you spend on your current trip?”

Table A.F.7 Time spent in hours on current trip

	< 1 hr	1-4 hrs	5-8hrs	> 8 hrs	Median	Mean	N
Management Unit F	6.3%	53.1%	31.3%	9.4%	4.0	4.4	32

Table A.F.7.a Time spent in days on current trip

	1-2days	3-4days	5-7days	>1 week	Median	Mean	N
Management Unit F	50.0%	33.3%	11.1%	5.6%	2.5	3.1	18

Q8 Management unit level responses to the questions

“If your current trip extends into two or more days, what type of overnight accommodations did you use on your trip?”

Table A.E.8 Management Unit F

	Yes
Campground (RV or tent)	32.0%
Location: <i>Refer to site-level surveys results tables</i>	
Rented cabin/condo/home/motel/hotel	12.0%
Location: <i>Refer to site-level surveys results tables</i>	
Your own home/property	40.0%
Other (<i>Please specify</i>):	16.0%
Other Text: <i>Refer to site-level surveys results tables</i>	

Q9 Management unit level responses to the question

“Did any of the following conditions adversely affect your trip?”

Table A.E.9 Management Unit F

	Yes
Strong winds	45.8%
Lack of shade from the sun	62.5%
Low water levels	20.8%
Lack of shelter from the weather	8.3%
Lack of ADA accessibility	4.2%

Q10 Management unit level responses to the question

“Grant PUD is interested in your opinion about the level of existing development and management at the reservoirs. Please indicate a response for **any** of the following facilities you used during your visit.”

Table A.E.10 Management Unit F

	Too High		About Right					Too Low		DK	Mean	SD
	1	2	3	4	5	6	7	8	9			
Number of public docks	0.0%	0.0%	0.0%	0.0%	70.4%	3.7%	0.0%	7.4%	18.5%	35.7%	6.0	1.7
Number of hiking trails	0.0%	0.0%	0.0%	0.0%	71.4%	0.0%	14.3%	0.0%	14.3%	47.5%	5.9	1.5
Quality of hiking trails	0.0%	0.0%	0.0%	0.0%	76.2%	4.8%	4.8%	0.0%	14.3%	48.8%	5.7	1.5
Number of swim/sunbathing areas	0.0%	0.0%	0.0%	0.0%	80.0%	4.0%	0.0%	0.0%	16.0%	35.9%	5.7	1.5
Number of campsites	0.0%	0.0%	0.0%	0.0%	83.3%	3.3%	0.0%	0.0%	13.3%	26.8%	5.6	1.4
Quality of swim/sunbathing areas	0.0%	0.0%	0.0%	0.0%	83.3%	4.2%	0.0%	0.0%	12.5%	40.0%	5.5	1.4
Number of picnic or day use areas	0.0%	0.0%	0.0%	2.9%	76.5%	5.9%	5.9%	0.0%	8.8%	19.0%	5.5	1.2
Quality of boat launches	0.0%	3.1%	3.1%	0.0%	68.8%	9.4%	3.1%	9.4%	3.1%	23.8%	5.4	1.4
Quality of on-line campground reservation system	0.0%	0.0%	0.0%	0.0%	90.0%	0.0%	0.0%	0.0%	10.0%	47.4%	5.4	1.2
Number of boat launches	0.0%	0.0%	0.0%	0.0%	84.8%	3.0%	3.0%	6.1%	3.0%	17.5%	5.4	1.0
Quality of public docks	0.0%	0.0%	0.0%	0.0%	89.3%	0.0%	0.0%	3.6%	7.1%	33.3%	5.4	1.2
Amount of shoreline available for use	2.8%	0.0%	0.0%	2.8%	75.0%	2.8%	8.3%	0.0%	8.3%	10.0%	5.4	1.4
Quality of campsites	0.0%	0.0%	0.0%	0.0%	85.2%	7.4%	0.0%	0.0%	7.4%	34.1%	5.4	1.1
Quality of picnic or day use areas	2.9%	0.0%	0.0%	0.0%	85.3%	2.9%	0.0%	2.9%	5.9%	15.0%	5.2	1.3
Cost to use facilities	0.0%	0.0%	0.0%	0.0%	96.7%	0.0%	0.0%	0.0%	3.3%	28.6%	5.1	0.7
Level of public recreation development	2.6%	0.0%	2.6%	0.0%	87.2%	0.0%	2.6%	2.6%	2.6%	4.9%	5.1	1.1
Number of restrooms/toilets	0.0%	2.3%	0.0%	0.0%	93.0%	4.7%	0.0%	0.0%	0.0%	2.3%	5.0	0.5
Quality of restrooms/toilets	4.7%	0.0%	2.3%	9.3%	74.4%	2.3%	2.3%	0.0%	4.7%	2.3%	4.9	1.4

Note: Response Scale: 1=Too high, 5=About Right, 9=Too Low

Q11 Management unit level responses to the question

“Please indicate the extent that the following issues were problems for you during your visit today”

Table A.E.11 Management Unit F

	No Problem						Big Problem			DK	Mean	SD	N
Adequate protection from the wind	60.5%	7.0%	4.7%	0.0%	16.3%	11.6%	0.0%	0.0%	0.0%	4.4%	2.4	2.0	45
Litter around the reservoir shoreline	66.7%	16.7%	4.8%	2.4%	2.4%	2.4%	0.0%	2.4%	2.4%	6.7%	1.9	1.9	45
Adequate information/warnings provided	79.1%	4.7%	4.7%	2.3%	7.0%	2.3%	0.0%	0.0%	0.0%	4.4%	1.6	1.3	45
Adequate safety and security	75.0%	11.4%	4.5%	4.5%	4.5%	0.0%	0.0%	0.0%	0.0%	2.2%	1.5	1.1	45
Disruptive behavior by others	88.6%	2.3%	0.0%	2.3%	4.5%	0.0%	0.0%	0.0%	2.3%	2.2%	1.5	1.5	45
Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	9.0	0.0	2
<i>(please specify): Refer to site-level surveys results tables</i>													

Note: Response Scale: 1= No Problem, 9= Big Problem

Q12 Management unit level responses to the question

“Help us understand crowding issues by answering the following questions. *(Mark one response for each item)*”

Table A.E.12 Management Unit F

	Not at all Crowded						Extremely Crowded			DK/NA	Mean	SD
How <i>crowded</i> did you feel today?	79.5%	9.1%	4.5%	4.5%	0.0%	4.3%	2.3%	0.0%	0.0%	0.0%	1.4	1.0
How crowded did you <u>expect</u> to feel today?	27.9%	9.3%	14.0%	18.6%	4.7%	2.3%	14.0%	4.7%	4.7%	2.3%	3.6	2.3

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Q14 Management unit level responses to the question

“Please estimate how much money you and your party will spend TODAY while on this trip (e.g., fuel, lodging, restaurants, groceries, admissions, fees, outdoor gear, etc.)”

Table A.E.14 Current Day Trip Expenditure

	Current Day Trip Expenditure (\$)								Median	Mean	SD
	0	1-50	51-100	101-150	151-200	201-300	301-500	>500			
Management Unit F	7.1%	28.6%	35.7%	4.8%	9.5%	2.4%	11.9%	0%	100	111.4	95.2

Q16 Management unit level responses to the question

If you were on the water today, “what areas of the Priest Rapids/Wanapum reservoirs did you use today? (Mark all areas used)”

Table A.E.16 Percent response on used areas of the Priest Rapids/Wanapum Reservoirs

	% response on used areas of the Priest Rapids/Wanapum Reservoirs							N
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit F	Unit G	
Management Unit F	20.0%	20.0%	20.0%	20.0%	40.0%	80.0%	-	5

Q17a Management unit level responses to the question

“Did you have to wait to use a boat launch today?”

Table A.E.17.a Response on having to wait to use boat launch

	Yes	No	N
Management Unit F	10.0%	90.0%	10

Q17.a Wait time: Management unit level responses to the question

“How long did you wait to use a boat launch today?”

Table A.E.17.a Current conditions on waiting times to use boat launch

	Wait Time (in minutes)						Min	Max	Mean	SD	N
	1	5	10	15	16	20					
Management Unit F	0.0%	50.0%	0.0%	100%	0.0%	0.0%	15	15	15	-	1

Q17.b Management unit level responses to the question

“How long of a wait to launch your boat is acceptable to you?”

Table A.E.17.b Acceptability of waiting times to use boat launch (in minutes)

	Acceptable waiting times (in minutes)							Min	Max	Mean	SD	N
	0	1-5	6-10	11-15	16-20	21-25	>25					
Management Unit F	12.5%	25.0%	12.5%	25.0%	-	-	25.0%	0	0	15.6	15.0	45

Q18.a Management unit level responses to the question

Please rate each photo by indicating how acceptable you think “how many boats could use the segments of the reservoirs that you used today without you feeling too crowded and unsafe”. A rating of -4 means the number of boats is “very unacceptable”, and a rating of +4 means the number of boats is “very acceptable”.

Table A.E.18.a Management Unit F

	Mean	SD	N
Photo 1	1.8	2.6	9
Photo 2	1.7	2.5	9
Photo 3	1.7	2.5	9
Photo 4	1.6	2.6	9
Photo 5	1.1	2.4	9
Photo 6	0.9	2.6	9

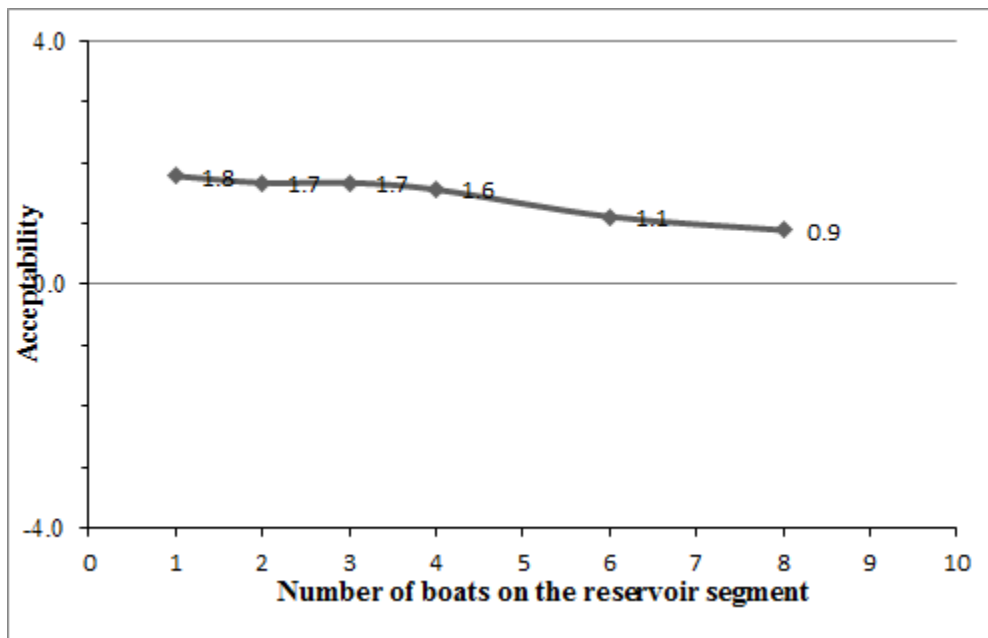


Figure A.E.18.a Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at Management Unit F

Q18.b Management unit level responses to the question

“Which photo shows the highest number of boats that should be allowed on the reservoir segments you used today? In other words, at what point should boats be restricted from using the reservoir because it is too crowded and unsafe? (If you think use should not be restricted, please indicate)”

Table A.E.18.b Highest number of boats to be allowed on the reservoir segment

	Photo 1	Photo 2	Photo 3	Photo 4	Photo 5	Photo 6	Mean	SD	N
Management Unit F	-	-	-	-	100.0%	-	5	-	1

Q18.bb Management unit level responses to the question

“None of the photos show a high enough number of boats to restrict use” (check box if you agree)

Table A.E.18.bb Agreement that none of the photos show a high enough number of boats to restrict use

	Yes	No	N
Management Unit F	100%	-	8

Q18.c Management unit level responses to the question

“Which photo looks most like the number of boats you typically saw on the reservoir segments you used today?”

Table A.E.18.c Photo that reflects number of boats seen on the reservoir

	Photo 1	Photo 2	Photo 3	Photo 4	Photo 5	Photo 6	Mean	SD	N
Management Unit F	40.0%	20.0%	-	20.0%	20.0%	20.0%	3.6	1.8	5

Management Unit G

Note: Management Unit G includes the following sites where surveys occurred:

1. Buckshot Recreation Area
2. Jackson Creek Fish Camp
3. PRRA

Q1 Management unit level responses to the questions

“How many people are in your vehicle today, including yourself? (*mark all that apply*)”

Table A-G.1 Number of people in respondent’s vehicle

	Min	Max	Mean	SD	N
Management Unit G	1	15	3.7	2.7	70

Q3 Management unit level responses to the question

“Please indicate which of the following activities you are participating in on this trip”

Table A-G.3 Management Unit G

	Indicated Yes (% of sample)
Resting	54.2%
Boating	50.7%
Swimming	41.1%
Waterskiing	27.8%
Fishing	23.6%
Golf	22.2%
Picnicking	18.1%
Wildlife	17.8%
Camping	16.7%
Photography	13.7%
Canoeing	12.5%
Jetskis	11.0%
Hiking	9.7%
Dam	5.6%
Concert	2.8%
Other	12.5%
<i>Other Text: Refer to site-level surveys results tables</i>	

Q7 Management unit level responses to the questions

“How much time will you spend on your current trip?”

Table A-G.7 Time spent in hours on current trip

	< 1 hr	1-4 hrs	5-8hrs	> 8 hrs	Median	Mean	N
Management Unit G	-	63.0%	37.0%	-	3.0	3.4	27

Table A-G.7.a Time spent in days on current trip

	1-2 days	3-4 days	5-7 days	>1 week	Median	Mean	N
Management Unit G	21.4%	45.2%	16.7%	16.7%	3.5	16.8	18

Q8 Management unit level responses to the questions

“If your current trip extends into two or more days, what type of overnight accommodations did you use on your trip?”

Table A-G.8 Management Unit G

	Yes
Campground (RV or tent)	30.9%
<i>Location: Refer to site-level surveys results tables</i>	
Rented cabin/condo/home/motel/hotel	5.5%
<i>Location: Refer to site-level surveys results tables</i>	
Your own home/property	52.7%
Other (<i>Please specify</i>):	14.5%
<i>Other Text: Refer to site-level surveys results tables</i>	

Q9 Management unit level responses to the question

“Did any of the following conditions adversely affect your trip?”

Table A-G.9 Management Unit G

	Yes
Strong winds	75.6%
Lack of shade from the sun	29.3%
Low water levels	4.9%
Lack of shelter from the weather	4.9%
Lack of ADA accessibility	2.4%

Q10 Management unit level responses to the question

“Grant PUD is interested in your opinion about the level of existing development and management at the reservoirs. Please indicate a response for any of the following facilities you used during your visit.”

Table A-G.10 Management Unit G

	Too High		About Right					Too Low		DK	Mean	SD
	1	2	3	4	5	6	7	8	9			
Amount of shoreline available for use	3.4%	0.0%	0.0%	3.4%	64.4%	3.4%	8.5%	0.0%	16.9%	3.3%	5.7	1.8
Number of restrooms/toilets	1.6%	1.6%	1.6%	0.0%	68.3%	3.2%	12.7%	1.6%	9.5%	3.1%	5.6	1.5
Number of swim/sunbathing areas	0.0%	0.0%	5.4%	0.0%	69.6%	7.1%	12.5%	3.6%	1.8%	9.7%	5.4	1.1
Number of campsites	0.0%	2.1%	0.0%	2.1%	81.3%	2.1%	2.1%	4.2%	6.3%	18.6%	5.4	1.3
Number of hiking trails	0.0%	2.1%	8.3%	2.1%	60.4%	2.1%	14.6%	4.2%	6.3%	20.0%	5.4	1.5
Number of public docks	0.0%	3.6%	3.6%	1.8%	69.6%	1.8%	5.4%	5.4%	8.9%	11.1%	5.4	1.6
Quality of swim/sunbathing areas	0.0%	0.0%	3.6%	3.6%	72.7%	3.6%	16.4%	0.0%	0.0%	11.3%	5.3	0.9
Quality of restrooms/toilets	1.7%	1.7%	5.1%	0.0%	69.5%	10.2%	5.1%	1.7%	5.1%	7.8%	5.2	1.4
Quality of on-line campground reservation system	0.0%	2.6%	0.0%	5.3%	78.9%	5.3%	5.3%	0.0%	2.6%	36.7%	5.1	1.0
Cost to use facilities	0.0%	0.0%	0.0%	1.9%	96.2%	1.9%	0.0%	0.0%	0.0%	14.5%	5.0	0.2
Number of boat launches	0.0%	1.7%	5.0%	3.3%	80.0%	3.3%	6.7%	0.0%	0.0%	4.8%	5.0	0.8
Quality of campsites	0.0%	2.2%	4.3%	0.0%	84.8%	6.5%	0.0%	2.2%	0.0%	23.3%	5.0	0.8
Quality of hiking trails	0.0%	4.2%	6.3%	2.1%	77.1%	2.1%	6.3%	0.0%	2.1%	17.2%	5.0	1.1
Quality of public docks	0.0%	3.8%	9.4%	1.9%	71.7%	3.8%	1.9%	3.8%	3.8%	11.7%	5.0	1.4
Level of public recreation development	3.2%	1.6%	3.2%	0.0%	85.5%	4.8%	1.6%	0.0%	0.0%	6.1%	4.8	0.9
Number of picnic or day use areas	3.6%	3.6%	0.0%	5.4%	83.9%	0.0%	0.0%	0.0%	3.6%	9.7%	4.8	1.2
Quality of picnic or day use areas	1.8%	3.6%	5.5%	9.1%	76.4%	1.8%	1.8%	0.0%	0.0%	9.8%	4.7	1.0
Quality of boat launches	1.6%	4.9%	13.1%	6.6%	70.5%	3.3%	0.0%	0.0%	0.0%	6.2%	4.5	1.0

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Q11 Management unit level responses to the question

“Please indicate the extent that the following issues were problems for you during your visit today”

Table A-G.11 Management Unit G

	No Problem		Big Problem				DK	Mean	SD	N			
Adequate protection from the wind	50.8%	6.3%	6.3%	7.9%	17.5%	1.6%	3.2%	3.2%	3.2%	6.0%	2.9	2.4	67
Adequate information/warnings provided	79.0%	6.5%	4.8%	4.8%	3.2%	0.0%	0.0%	0.0%	1.6%	8.8%	1.6	1.4	68
Disruptive behavior by others	85.2%	3.3%	4.9%	0.0%	4.9%	0.0%	0.0%	0.0%	1.6%	10.3%	1.5	1.4	68
Litter around the reservoir shoreline	86.4%	6.1%	1.5%	0.0%	3.0%	0.0%	0.0%	0.0%	3.0%	4.3%	1.5	1.5	69
Adequate safety and security	86.2%	6.2%	3.1%	0.0%	1.5%	1.5%	0.0%	0.0%	1.5%	4.4%	1.4	1.3	68
Other (please specify):	14.3%	42.9%	0.0%	0.0%	14.3%	0.0%	0.0%	0.0%	28.6%	0.0%	4.3	3.3	14
	Refer to site-level surveys results tables												

Note: Response Scale: 1= No Problem, 9= Big Problem

Q12 Management unit level responses to the question

“Help us understand crowding issues by answering the following questions. *(Mark one response for each item)*”

Table A-G.12 Management Unit G

	Not at all Crowded					Extremely Crowded					DK/NA	Mean	SD
How <i>crowded</i> did you feel today?	76.5%	13.2%	4.4%	4.4%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4	1.0
How crowded did you <u>expect</u> to feel today?	40.9%	12.1%	12.1%	16.7%	3.0%	6.1%	3.0%	4.5%	1.5%	1.5%	2.9	2.2	

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Q14 Management unit level responses to the question

“Please estimate how much money you and your party will spend TODAY while on this trip (e.g., fuel, lodging, restaurants, groceries, admissions, fees, outdoor gear, etc.)”

Table A-G.14 Current Day Trip Expenditure

	Current Day Trip Expenditure (\$)								Median	Mean	SD
	0	1-50	51-100	101-150	151-200	201-300	301-500	>500			
Management Unit G	12.7%	22.2%	28.6%	3.2%	14.3%	7.9%	11.1%	-	100	140.4	136.4

Q16 Management unit level responses to the question

If you were on the water today, “what areas of the Priest Rapids/Wanapum reservoirs did you use today? (Mark all areas used)”

Table A-G.16 Percent response on used areas of the Priest Rapids/Wanapum Reservoirs

% response on used areas of the Priest Rapids/Wanapum Reservoirs								
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit F	Unit G	N
Management Unit G	5.6%	5.6%	5.6%	5.6%	5.6%	22.2%	88.9%	18

Q17.a Management unit level responses to the question

“Did you have to wait to use a boat launch today?”

Table A-G.17.a Response on having to wait to use boat launch

	Yes	No	N
Management Unit G	3.7%	96.3%	27

Q17.aa Wait time: Management unit level responses to the question

“How long did you wait to use a boat launch today?”

Table A-G.17.aa Current conditions on waiting times to use boat launch

	Wait Time (in minutes)							Min	Max	Mean	SD	N
	1	5	10	15	16	20						
Management Unit G	-	-	100%	-	-	-	10	10	10	-	1	

Q17.b Management unit level responses to the question

“How long of a wait to launch your boat is acceptable to you?”

Table A-G.17.b Acceptability of waiting times to use boat launch (in minutes)

	Acceptable waiting times (in minutes)							Min	Max	Mean	SD	N
	0	1-5	6-10	11-15	16-20	21-25	>25					
Management Unit G	20.0%	40.0%	13.3%	26.7%	-	-	-	0	15	7.1	5.8	15

Q18.a Management unit level responses to the question

Please rate each photo by indicating how acceptable you think “how many boats could use the segments of the reservoirs that you used today without you feeling too crowded and unsafe”. A rating of -4 means the number of boats is “very unacceptable”, and a rating of +4 means the number of boats is “very acceptable”.

Table A-G.18.a Management Unit G

	Mean	SD	N
Photo 1	3.0	1.7	18
Photo 2	3.1	1.6	18
Photo 3	2.6	1.5	18
Photo 4	2.1	1.9	18
Photo 5	0.5	2.5	18
Photo 6	-0.1	2.5	18

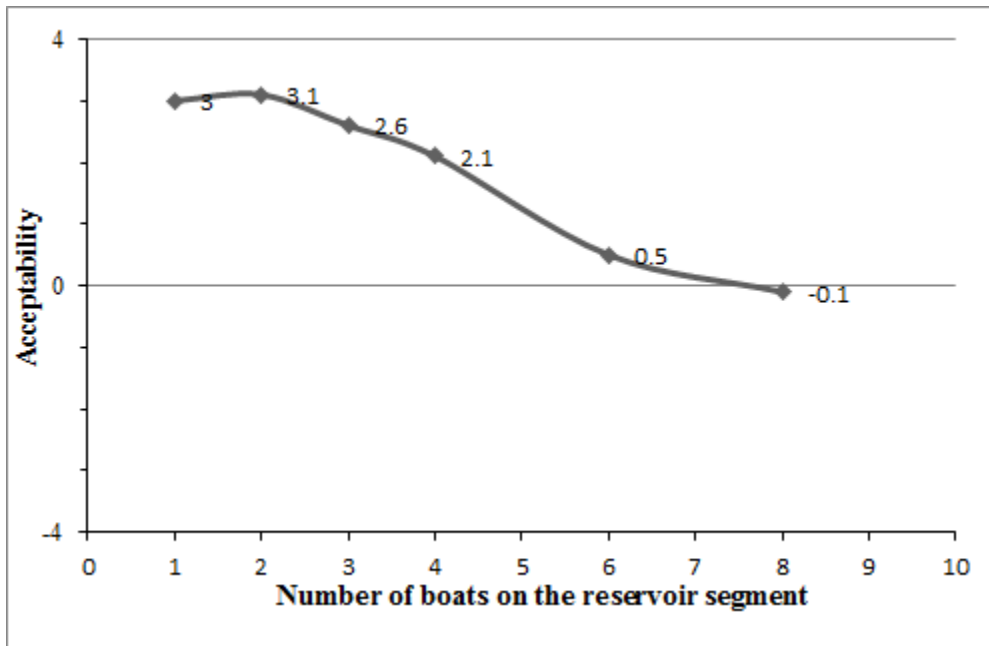


Figure A-G.18.a Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at Management Unit G

Q18.b Management unit level responses to the question

“Which photo shows the highest number of boats that should be allowed on the reservoir segments you used today? In other words, at what point should boats be restricted from using the reservoir because it is too crowded and unsafe? (If you think use should not be restricted, please indicate)”

Table A-G.18.b Highest number of boats to be allowed on the reservoir segment

	Photo 1	Photo 2	Photo 3	Photo 4	Photo 5	Photo 6	Mean	SD	N
Management Unit G	12.5%	-	12.5%	37.5%	25.0%	12.5%	4	1.5	8

Q18.bb Management unit level responses to the question

“None of the photos show a high enough number of boats to restrict use” (check box if you agree)

Table A-G.18.bb Agreement that none of the photos show a high enough number of boats to restrict use

	Yes	No	N
Management Unit G	50%	50%	14

Q18.c Management unit level responses to the question

“Which photo looks most like the number of boats you typically saw on the reservoir segments you used today?”

Table A-G.18.c Photo that reflects number of boats seen on the reservoir

	Photo 1	Photo 2	Photo 3	Photo 4	Photo 5	Photo 6	Mean	SD	N
Management Unit G	23.5%	29.4%	29.4%	5.9%	5.9%	5.9%	2.6	1.4	17

APPENDIX B

Site-level Survey Results

Table B.0 Respondents at each sampling locations for the visitor questionnaire

Intercept location	Frequency	Percent
Beverly Sand Dunes ORV Park	5	0.7
Buckshot Recreation Area	4	0.5
Burkett Lake Recreation Area	4	0.5
CBRA	179	23.9
Frenchman Coulee Recreation Area	36	4.8
Huntzinger Road Boat Launch	6	0.8
Huntzinger Road Fishing Access Site	3	0.4
Jackson Creek Fish Camp	5	0.7
PRRA	65	8.7
Quilomene Dune & Bay	111	14.8
Rattlesnake Cove	11	1.5
Riverstone Resort	12	1.6
Rocky Coulee	41	5.5
Sand Hollow	36	4.8
Sunland Boat Launch	24	3.2
Sunland Picnic Area	8	1.1
The Cove	6	0.8
Vantage Boat Launch	76	10.2
Wanapum Dam Lower Boat Launch	25	3.3
Wanapum Dam Overlook	19	2.5
Wanapum Dam Upper Boat Launch	7	0.9
Wanapum Recreation Area (WSP)	57	7.6
Wanapum Turbine Park	8	1.1
Total	748	100

Q1 Site-level responses to the questions

“How many people are in your vehicle today, including yourself? (*mark all that apply*)”

Table B.1 Number of people in respondent’s vehicle

Site	Min	Max	Mean	SD
Beverly Sand Dunes ORV Park	1	5	2.8	1.6
Buckshot Recreation Area	2	4	2.8	1.0
Burkett Lake Recreation Area	2	5	3.5	1.3
CBRA	1	25	4.5	3.3
Frenchman Coulee Recreation Area	1	6	2.1	1.1
Huntzinger Road Boat Launch	1	4	2.0	0.9
Huntzinger Road Fishing Access Site	1	2	1.7	0.6
Jackson Creek Fish Camp	1	2	1.6	0.5
PRRA	1	15	3.9	2.9
Quilomene Dune & Bay	1	15	5.5	3.0
Rattlesnake Cove	2	5	3.1	1.1
Riverstone Resort	2	5	3.0	1.0
Rocky Coulee	1	11	2.8	2.1
Sand Hollow	1	12	3.1	2.4
Sunland Boat Launch	1	13	4.2	2.7
Sunland Picnic Area	1	5	3.4	1.5
The Cove	1	2	1.7	0.5
Vantage Boat Launch	1	9	2.7	1.7
Wanapum Dam Lower Boat Launch	1	4	2.3	0.8
Wanapum Dam Overlook	1	5	2.3	1.3
Wanapum Dam Upper Boat Launch	1	5	3.0	1.4
Wanapum Recreation Area (WSP)	1	10	4.4	2.0
Wanapum Turbine Park	1	6	2.1	1.6

Q3 Site-level responses to the question

“Please indicate which of the following activities you are participating in on this trip”

Table B.3.1 Beverly Sand Dunes ORV Park

	Indicated Yes (% of sample)
Resting/relaxing	60%
Camping	60%
Swimming/visiting the beach	0%
Boating	0%
Riding jet skis/wave runners	0%
Photography	0%
Wildlife Viewing	0%
Picnicking	0%
Attending a concert	0%
Fishing	0%
Visiting a dam	0%
Waterskiing/tubing/wakeboarding	0%
Hiking	0%
Canoeing/kayaking/paddle boarding	0%
Golf	0%
Other	100%
<i>Other Text: Riding, riding ATVs, dirt bike, & quad</i>	

Table B.3.2 Buckshot Recreation Area

	Indicated Yes (% of sample)
Resting/relaxing	75.0%
Swimming/visiting the beach	50.0%
Boating	25.0%
Waterskiing/tubing/wakeboarding	25.0%
Riding jet skis/wave runners	0.0%
Photography	0.0%
Wildlife Viewing	0.0%
Picnicking	0.0%
Attending a concert	0.0%
Fishing	0.0%
Visiting a dam	0.0%
Camping	0.0%
Hiking	0.0%
Canoeing/kayaking/paddle boarding	0.0%
Golf	0.0%
Other	0.0%

Table B.3.3 Burkett Lake Recreation Area

	Indicated Yes (% of sample)
Fishing	66.70%
Resting/relaxing	33.30%
Visiting a dam	33.30%
Swimming/visiting the beach	0%
Boating	0%
Riding jet skis/wave runners	0%
Photography	0%
Wildlife Viewing	0%
Picnicking	0%
Attending a concert	0%
Camping	0%
Waterskiing/tubing/wakeboarding	0%
Hiking	0%
Canoeing/kayaking/paddle boarding	0%
Golf	0%
Other	0%

Table B.3.4 CBRA

	Indicated Yes (% of sample)
Swimming/visiting the beach	86.6%
Resting/relaxing	69.3%
Boating	43.6%
Camping	38.0%
Golf	27.9%
Waterskiing/tubing/wakeboarding	25.7%
Picnicking	24.6%
Photography	20.7%
Wildlife Viewing	20.7%
Attending a concert	20.1%
Riding jet skis/wave runners	19.0%
Canoeing/kayaking/paddle boarding	13.4%
Hiking	6.7%
Fishing	3.4%
Visiting a dam	1.7%
Other	9.5%
<i>Other Text: Basketball, visiting businesses, having some cold, family time, watershed, drinking, wedding, friends at Crescent bar, concert, red necking birthday party.</i>	

Table B.3.5 Frenchman Coulee Recreation Area

	Indicated Yes (% of sample)
Swimming/visiting the beach	75.0%
Resting/relaxing	47.2%
Wildlife Viewing	25.0%
Camping	25.0%
Photography	22.2%
Hiking	22.2%
Picnicking	13.9%
Attending a concert	13.9%
Fishing	8.3%
Boating	5.6%
Riding jet skis/wave runners	2.8%
Visiting a dam	0.0%
Waterskiing/tubing/wakeboarding	0.0%
Canoeing/kayaking/paddle boarding	0.0%
Golf	0.0%
Other	27.8%
<i>Other Text: Climbing, biking, hunting (shooting), nude beach, visitor counter/museum, geocaching, information, dog exercise</i>	

Table B.3.6 Huntzinger Road Boat Launch, N=9

	Indicated Yes (% of sample)
Fishing	66.7%
Resting/relaxing	44.4%
Boating	33.3%
Wildlife Viewing	22.2%
Swimming/visiting the beach	11.1%
Photography	11.1%
Visiting a dam	11.1%
Riding jet skis/wave runners	0.0%
Picnicking	0.0%
Attending a concert	0.0%
Camping	0.0%
Waterskiing/tubing/wakeboarding	0.0%
Hiking	0.0%
Canoeing/kayaking/paddle boarding	0.0%
Golf	0.0%
Other	11.1%
<i>Other Text: Dog swimming, training</i>	

Table B.3.7 Huntzinger Road Fishing Access Site

	Indicated Yes (% of sample)
Resting/relaxing	66.70%
Fishing	66.70%
Boating	33.30%
Swimming/visiting the beach	0.00%
Riding jet skis/wave runners	0.00%
Photography	0.00%
Wildlife Viewing	0.00%
Picnicking	0.00%
Attending a concert	0.00%
Visiting a dam	0.00%
Camping	0.00%
Waterskiing/tubing/wakeboarding	0.00%
Hiking	0.00%
Canoeing/kayaking/paddle boarding	0.00%
Golf	0.00%
Other	0.00%

Table B.3.8 Jackson Creek Fish Camp

	Indicated Yes (% of sample)
Fishing	80%
Swimming/visiting the beach	20%
Resting/relaxing	20%
Boating	0%
Riding jet skis/wave runners	0%
Photography	0%
Wildlife Viewing	0%
Picnicking	0%
Attending a concert	0%
Visiting a dam	0%
Camping	0%
Waterskiing/tubing/wakeboarding	0%
Hiking	0%
Canoeing/kayaking/paddle boarding	0%
Golf	0%
Other	0%

Table B.3.9 PRRA

	Indicated Yes (% of sample)
Boating	56.3%
Resting/relaxing	55.6%
Swimming/visiting the beach	42.2%
Waterskiing/tubing/wakeboarding	30.2%
Golf	25.4%
Picnicking	20.6%
Fishing	20.6%
Wildlife Viewing	20.3%
Camping	19.0%
Photography	15.6%
Canoeing/kayaking/paddle boarding	14.3%
Riding jet skis/wave runners	12.5%
Hiking	11.1%
Visiting a dam	6.3%
Attending a concert	3.2%
Other	14.3%
<i>Other Text: Dog walk, yoga, walking, walking the trail, bike riding, jogging</i>	

Table B.3.10 Quilomene Dune & Bay

	Indicated Yes (% of sample)
Boating	96.4%
Swimming/visiting the beach	92.8%
Resting/relaxing	82.0%
Waterskiing/tubing/wakeboarding	66.4%
Wildlife Viewing	34.2%
Picnicking	33.3%
Riding jet skis/wave runners	27.0%
Photography	21.6%
Camping	19.1%
Golf	19.1%
Fishing	15.3%
Canoeing/kayaking/paddle boarding	10.9%
Attending a concert	9.0%
Hiking	8.2%
Visiting a dam	3.6%
Other	5.5%
<i>Other Text: Sandbar, refreshments, drinking, surfing, sand castles, wake surfing</i>	

Table B.3.11 Rattlesnake Cove

	Indicated Yes (% of sample)
Swimming/visiting the beach	100.0%
Resting/relaxing	54.5%
Attending a concert	54.5%
Wildlife Viewing	36.4%
Camping	36.4%
Picnicking	18.2%
Boating	9.1%
Riding jet skis/wave runners	9.1%
Photography	9.1%
Fishing	9.1%
Waterskiing/tubing/wakeboarding	9.1%
Hiking	9.1%
Canoeing/kayaking/paddle boarding	9.1%
Other	9.1%
Visiting a dam	0.0%
Golf	0.0%
Other Text: <i>Home in Quincy</i>	

Table B.3.12 Riverstone Resort

	Indicated Yes (% of sample)
Resting/relaxing	91.7%
Swimming/visiting the beach	83.3%
Picnicking	41.7%
Photography	25.0%
Wildlife Viewing	25.0%
Camping	25.0%
Attending a concert	16.7%
Hiking	16.7%
Boating	8.3%
Riding jet skis/wave runners	8.3%
Fishing	8.3%
Visiting a dam	0.0%
Waterskiing/tubing/wakeboarding	0.0%
Canoeing/kayaking/paddle boarding	0.0%
Golf	0.0%
Other	8.3%
Other Text: <i>Off road driving</i>	

Table B.3.13 Rocky Coulee

	Indicated Yes (% of sample)
Resting/relaxing	58.5%
Swimming/visiting the beach	53.7%
Wildlife Viewing	41.5%
Hiking	31.7%
Photography	29.3%
Picnicking	29.3%
Camping	24.4%
Fishing	9.8%
Canoeing/kayaking/paddle boarding	9.8%
Riding jet skis/wave runners	7.3%
Boating	4.9%
Attending a concert	4.9%
Waterskiing/tubing/wakeboarding	4.9%
Visiting a dam	2.4%
Golf	2.4%
Other	20.0%
<i>Other Text: Fun, visiting the wind horse wind farm, petroglyphs/gem, rock store, dogs, climbing, dog in water, balls, Silver wood</i>	

Table B.3.14 Sand Hollow

	Indicated Yes (% of sample)
Resting/relaxing	75.0%
Swimming/visiting the beach	69.4%
Camping	52.8%
Picnicking	36.1%
Attending a concert	27.8%
Photography	22.2%
Wildlife Viewing	19.4%
Hiking	13.9%
Boating	11.1%
Riding jet skis/wave runners	5.6%
Fishing	5.6%
Visiting a dam	5.6%
Waterskiing/tubing/wakeboarding	5.6%
Golf	5.6%
Canoeing/kayaking/paddle boarding	0.0%
Other	11.1%
<i>Other Text: Restroom, Mecca, visiting my father's ashes</i>	

Table B.3.15 Sunland Boat Launch

	Indicated Yes (% of sample)
Boating	83.3%
Swimming/visiting the beach	70.8%
Resting/relaxing	62.5%
Waterskiing/tubing/wakeboarding	41.7%
Wildlife Viewing	33.3%
Riding jet skis/wave runners	29.2%
Picnicking	25.0%
Attending a concert	16.7%
Fishing	12.5%
Camping	12.5%
Canoeing/kayaking/paddle boarding	12.5%
Golf	12.5%
Photography	8.3%
Hiking	8.3%
Visiting a dam	4.2%
Other	0.0%

Table B.3.16 Sunland Picnic Area

	Indicated Yes (% of sample)
Swimming/visiting the beach	100.0%
Resting/relaxing	50.0%
Picnicking	37.5%
Golf	37.5%
Wildlife Viewing	25.0%
Attending a concert	25.0%
Photography	12.5%
Visiting a dam	12.5%
Camping	12.5%
Hiking	12.5%
Boating	0.0%
Riding jet skis/wave runners	0.0%
Fishing	0.0%
Waterskiing/tubing/wakeboarding	0.0%
Canoeing/kayaking/paddle boarding	0.0%
Other	12.5%
Other Text: <i>Throwing ball for dog</i>	

Table B.3.17 The Cove

	Indicated Yes (% of sample)
Resting/relaxing	66.7%
Swimming/visiting the beach	33.3%
Wildlife Viewing	33.3%
Picnicking	33.3%
Hiking	33.3%
Photography	16.7%
Visiting a dam	16.7%
Boating	0%
Riding jet skis/wave runners	0%
Attending a concert	0%
Fishing	0%
Camping	0%
Waterskiing/tubing/wakeboarding	0%
Canoeing/kayaking/paddle boarding	0%
Golf	0%
Other	16.7%
Other Text: <i>Dog walking, bike riding</i>	

Table B.3.18 Vantage Boat Launch

	Indicated Yes (% of sample)
Resting/relaxing	54.7%
Swimming/visiting the beach	50.7%
Boating	36.0%
Picnicking	22.7%
Photography	17.3%
Waterskiing/tubing/wakeboarding	17.3%
Wildlife Viewing	14.7%
Camping	9.3%
Fishing	8.0%
Hiking	6.7%
Riding jet skis/wave runners	5.3%
Visiting a dam	4.0%
Attending a concert	1.3%
Canoeing/kayaking/paddle boarding	1.3%
Golf	0.0%
Other	16.0%
Other Text: <i>Restroom, on our way to Seattle, driving through, walking dog, personal, moving daughter to new home-Pullman/WSU student, Baseball tournament in Moses Lake, chasing ducks (kids), rock collecting, dog swim, letting dog pee</i>	

Table B.3.19 Wanapum Dam Lower Boat Launch

	Indicated Yes (% of sample)
Fishing	83.3%
Resting/relaxing	20.8%
Wildlife Viewing	16.7%
Photography	12.5%
Swimming/visiting the beach	8.3%
Boating	8.3%
Picnicking	4.2%
Visiting a dam	4.2%
Hiking	4.2%
Riding jet skis/wave runners	0.0%
Attending a concert	0.0%
Camping	0.0%
Waterskiing/tubing/wakeboarding	0.0%
Canoeing/kayaking/paddle boarding	0.0%
Golf	0.0%
Other	0.0%

Table B.3.20 Wanapum Dam Overlook

	Indicated Yes (% of sample)
Resting/relaxing	61.1%
Photography	33.3%
Visiting a dam	27.8%
Wildlife Viewing	22.2%
Picnicking	22.2%
Camping	16.7%
Hiking	11.1%
Swimming/visiting the beach	5.6%
Boating	5.6%
Riding jet skis/wave runners	5.6%
Attending a concert	5.6%
Waterskiing/tubing/wakeboarding	5.6%
Fishing	0.0%
Canoeing/kayaking/paddle boarding	0.0%
Golf	0.0%
Other	52.9%
Other Text: <i>Just driving through, work, mountain biking, vacation, restroom, softball tournament, visiting friends, driving, going to pee</i>	

Table B.3.21 Wanapum Dam Upper Boat Launch

	Indicated Yes (% of sample)
Boating	57.1%
Resting/relaxing	42.9%
Swimming/visiting the beach	28.6%
Fishing	28.6%
Photography	14.3%
Wildlife Viewing	14.3%
Picnicking	14.3%
Hiking	14.3%
Riding jet skis/wave runners	0.0%
Attending a concert	0.0%
Visiting a dam	0.0%
Camping	0.0%
Waterskiing/tubing/wakeboarding	0.0%
Canoeing/kayaking/paddle boarding	0.0%
Golf	0.0%
Other	14.3%
<i>Other Text: Checking area , doing boat repairs before bringing family</i>	

Table B.3.22 Wanapum Recreation Area (WSP)

	Yes (% of sample)
Swimming/visiting the beach	82.5%
Resting/relaxing	57.9%
Camping	42.1%
Picnicking	38.6%
Boating	36.8%
Waterskiing/tubing/wakeboarding	28.1%
Photography	17.5%
Attending a concert	17.5%
Riding jet skis/wave runners	14.0%
Hiking	14.0%
Wildlife Viewing	10.5%
Fishing	8.8%
Canoeing/kayaking/paddle boarding	3.5%
Visiting a dam	0.0%
Golf	0.0%
Other	3.5%
<i>Other Text: Church event, cycling</i>	

Table B.3.23 Wanapum Turbine Park

	Indicated Yes (% of sample)
Resting/relaxing	50.0%
Wildlife Viewing	37.5%
Picnicking	25.0%
Visiting a dam	25.0%
Hiking	25.0%
Swimming/visiting the beach	12.5%
Boating	12.5%
Fishing	12.5%
Camping	12.5%
Canoeing/kayaking/paddle boarding	12.5%
Riding jet skis/wave runners	0.0%
Photography	0.0%
Attending a concert	0.0%
Waterskiing/tubing/wakeboarding	0.0%
Golf	0.0%
Other	37.5%
Other Text: <i>Pit stop on road trip, cross state travel, visiting relatives.</i>	

Q7 Site-level responses to the questions

“How much time will you spend on your current trip?”

Table B.7 Time spent in hours on current trip

	< 1 hr	1-4 hrs	5-8hrs	> 8 hrs	Median	Mean	N
Buckshot Recreation Area	0.0%	0.0%	100.0%	0.0%	5.0	5.0	1
Burkett Lake Recreation Area	0.0%	100.0%	0.0%	0.0%	2.0	2.3	3
CBRA	0.0%	61.4%	36.4%	2.3%	4.0	4.3	44
Frenchman Coulee Recreation Area	0.0%	84.6%	15.4%	0.0%	3.0	3.0	26
Huntzinger Road Boat Launch	0.0%	60.0%	40.0%	0.0%	4.0	4.2	5
Huntzinger Road Fishing Access Site	0.0%	0.0%	100%	0.0%	6.0	6.7	3
Jackson Creek Fish Camp	0.0%	70.8%	29.2%	0.0%	5.0	5.0	2
PRRA	0.0%	24.4%	65.9%	9.8%	3.0	3.2	24
Quilomene Dune & Bay	0.0%	100%	0.0%	0.0%	6.0	6.3	41
Rattlesnake Cove	0.0%	85.7%	14.3%	0.0%	3.0	3.0	5
Riverstone Resort	4.0%	88.0%	4.0%	4.0%	1.0	2.4	7
Rocky Coulee	11.8%	88.2%	0.0%	0.0%	2.0	2.5	25
Sand Hollow	0.0%	28.6%	71.4%	0.0%	1.0	1.9	17
Sunland Boat Launch	0.0%	100%	0.0%	0.0%	7.0	5.6	7
Sunland Picnic Area	0.0%	75.0%	25.0%	0.0%	3.5	3.0	4
The Cove	11.9%	52.5%	32.2%	3.4%	3.0	3.3	4
Vantage Boat Launch	0.0%	50.0%	37.5%	12.5%	4.0	3.7	59
Wanapum Dam Lower Boat Launch	20.0%	60.0%	20.0%	0.0%	4.5	5.3	16
Wanapum Dam Overlook	14.3%	57.1%	28.6%	0.0%	1.5	2.1	10
Wanapum Dam Upper Boat Launch	0.0%	25.9%	59.3%	14.8%	4.0	3.6	7
Wanapum Recreation Area (WSP)	40.0%	40.0%	20.0%	0.0%	6.0	6.4	27
Wanapum Turbine Park	0.0%	33.3%	33.3%	33.3%	1.0	1.7	5
Total	4.4%	57.9%	33.3%	4.4%	4.0	4.1	342

Table B.7.a Time spent in days on current trip

	1-2 days	3-4 days	5-7 days	>1 week	Median	Mean	N
Beverly Sand Dunes ORV Park	60%	40%	0%	0%	2.0	2.0	5
Buckshot Recreation Area	50%	0%	50%	0%	3.5	3.5	2
CBRA	14%	47%	27%	11%	4	5.3	133
Frenchman Coulee Recreation Area	75%	17%	0%	8%	2.0	2.6	12
Huntzinger Road Boat Launch	100%	0%	0%	0%	2.0	2.0	1
Huntzinger Road Fishing Access Site	100%	0%	0%	0%	1.0	1.0	1
Jackson Creek Fish Camp	0%	0%	33%	67%	14.0	11.7	3
PRRA	22%	51%	14%	14%	3.0	17.9	37
Quilomene Dune & Bay	19%	36%	27%	18%	4.0	5.7	67
Rattlesnake Cove	83%	17%	0%	0%	2.0	2.2	6
Riverstone Resort	67%	17%	17%	0%	2.0	2.5	6
Rocky Coulee	50%	36%	7%	7%	2.5	4.6	14
Sand Hollow	22%	56%	22%	0%	3.1	3.5	18
Sunland Boat Launch	29%	21%	29%	21%	4.0	16.7	14
Sunland Picnic Area	0%	100%	0%	0%	3.0	3.0	3
The Cove	50%	50%	0%	0%	3.0	3.0	2
Vantage Boat Launch	24%	24%	24%	29%	5.0	9.9	17
Wanapum Dam Lower Boat Launch	44%	33%	11%	11%	3.0	3.7	9
Wanapum Dam Overlook	38%	50%	0%	13%	3.0	17.5	8
Wanapum Dam Upper Boat Launch	100%	0%	0%	0%	1.0	1.0	1
Wanapum Recreation Area (WSP)	45%	45%	10%	0%	3.0	2.9	31
Wanapum Turbine Park	0%	50%	50%	0%	4.5	4.5	2
Total	27%	41%	20%	12%	3.0	6.8	392

Q8 Site-level responses to the questions

“If your current trip extends into two or more days, what type of overnight accommodations did you use on your trip?”

Table B.8.1 Beverly Sand Dunes ORV Park

	Yes
Campground (RV or tent)	100%
Location: <i>Beverly ORV Park, campground</i>	
Rented cabin/condo/home/motel/hotel	0%
Your own home/property	0%
Other (<i>Please specify</i>):	0%

Table B.8.2 Buckshot Recreation Area

	Yes
Campground (RV or tent)	0%
Rented cabin/condo/home/motel/hotel	0%
Your own home/property	0%
Other (<i>Please specify</i>):	100%
Other Text: <i>Daily visited this place for 2 or 3 months</i>	

Table B.8.3 Burkett Lake Recreation Area

	Yes
Campground (RV or tent)	100%
Location: <i>Beverly dunes</i>	
Rented cabin/condo/home/motel/hotel	0%
Your own home/property	0%
Other (<i>Please specify</i>):	0%

Table B.8.4 CBRA

	Yes
Campground (RV or tent)	47.6%
Location: <i>Crescent Bar Campground, Quincy Lakes, CB off Island, 1000 trails, tent CB campground, Watershed/ The Gorge, Quincy/ Knights Inn, Wild house, Gorge Amphitheatre, Quilomene Dune, On the water, Resort RV camping Crescent Bar, KOA, tent at the campground</i>	
Rented cabin/condo/home/motel/hotel	19.9%
Location: <i>Crescent Bar Resort, Watershed/ Gorge, Quincy, Home, Sunsera, UC Crescent Resort, The Suites at Crescent Bar, CB resort, Crescent Bar Condos, On Island Condo, White condos</i>	
Your own home/property	32.2%
Other (<i>Please specify</i>):	5.5%
Other Text: <i>Live about a 1 mile away, Beach Pay, House, Friends property, Hotel</i>	

Table B.8.5 Frenchman Coulee Recreation Area

	Yes
Campground (RV or tent)	50%
Location: <i>Frenchman Coulee (WDFW), Crescent bar, Gorge</i>	
Rented cabin/condo/home/motel/hotel	12.5%
Location: <i>Moses Lake, Vantage Riverstone resort</i>	
Your own home/property	25.0%
Other (<i>Please specify</i>):	18.8%
Other Text: <i>Family</i>	

Table B.8.6 Huntzinger Road Boat Launch

	Yes
Campground (RV or tent)	0%
Rented cabin/condo/home/motel/hotel	33.3%
Location: <i>Grand Coulee</i>	
Your own home/property	66.7%
Other (<i>Please specify</i>):	0%

Table B.8.7 Huntzinger Road Fishing Access Site

	Yes
Campground (RV or tent)	0.0%
Location:	
Rented cabin/condo/home/motel/hotel	0.0%
Location:	
Your own home/property	100.0%
Other (<i>Please specify</i>):	0.0%

Table B.8.8 Jackson Creek Fish Camp

	Yes
Campground (RV or tent)	100%
Location: <i>Multiple, House, tent</i>	
Rented cabin/condo/home/motel/hotel	0%
Your own home/property	0%
Other (<i>Please specify</i>):	0%

Table B.8.9 PRRA

	Yes
Campground (RV or tent)	27.5%
Location: <i>Site 10, 11 PRRA, Priest rapids, Motorhome (PRRA campground),</i>	
Rented cabin/condo/home/motel/hotel	5.9%
Location: <i>Beach drive, Orchard dr. near dam</i>	
Your own home/property	56.9%
Other (<i>Please specify</i>):	13.7%
Other Text: <i>Staying at a church, Staying with friends, brother lives here</i>	

Table B.8.10 Quilomene Dune & Bay

	Yes
Campground (RV or tent)	20.5%
Location: <i>Crescent Bar, Crescent Bar Resort RV Park, Watches, Ellensburg Boat club, Tent Sunland, Quilomene, Vantage, Wanapum state park</i>	
Rented cabin/condo/home/motel/hotel	30.7%
Location: <i>Condo/ VRBO, Crescent Bar, Sunland, Crescent Bar Condos, Ellensburg</i>	
Your own home/property	46.6%
Other (<i>Please specify</i>):	4.7%
Other Text: <i>We do both campground & rentals, We rent a lot in the trailer park & put our RV on it, Boat, staying with family</i>	

Table B.8.11 Rattlesnake Cove, N=11

	Yes
Campground (RV or tent)	45.5%
Location: <i>Gorge Campground, Wildhorse Campground</i>	
Rented cabin/condo/home/motel/hotel	9.1%
Location:	
Your own home/property	36.4%
Other (Please specify):	9.1%
Other Text: <i>friends w/ home in Sunland</i>	

Table B.8.12 Riverstone Resort

	Yes
Campground (RV or tent)	55.6%
Location: <i>Gorge, Riverstone, Vantage Riverstone, Clean Lake</i>	
Rented cabin/condo/home/motel/hotel	44.4%
Location: <i>Riverstone Resort, Riverside Hotel</i>	
Your own home/property	0%
Other (Please specify):	11.1%
Other Text: <i>Would love to see more campsites</i>	

Table B.8.13 Rocky Coulee

	Yes
Campground (RV or tent)	57.1%
Location: <i>Rocky Coulee, Puyallup, Wanapum State Park, Rivers edge, Gorge Amphitheatre</i>	
Rented cabin/condo/home/motel/hotel	23.8%
Location: <i>Super 8, Spokane, Cover d'alene, Ellensburg, Econo lodge at Ellensburg, Sun Lakes</i>	
Your own home/property	14.3%
Other (Please specify):	9.5%
Other Text: <i>Truck, next time tent</i>	

Table B.8.14 Sand Hollow

	Yes
Campground (RV or tent)	80.8%
Location: <i>Sand Hollow Campground, Ellensburg</i>	
Rented cabin/condo/home/motel/hotel	7.7%
Location: <i>Pasco, Lake Chelan</i>	
Your own home/property	7.7%
Other (Please specify):	3.8%
Other Text: <i>Hanging at the campground</i>	

Table B.8.15 Sunland Boat Launch

	Yes
Campground (RV or tent)	9.5%
Location: <i>Gorge</i>	
Rented cabin/condo/home/motel/hotel	4.8%
Location:	
Your own home/property	90.5%
Other (<i>Please specify</i>):	9.5%
Other Text: <i>Grandparents house</i>	

Table B.8.16 Sunland Picnic Area

	Yes
Campground (RV or tent)	0%
Location:	
Rented cabin/condo/home/motel/hotel	33.3%
Location: <i>Sunland</i>	
Your own home/property	66.7%
Other (<i>Please specify</i>):	16.7%
Other Text:	

Table B.8.17 The Cove

	Yes
Campground (RV or tent)	0%
Location:	
Rented cabin/condo/home/motel/hotel	50%
Location: <i>Moses Lake</i>	
Your own home/property	50%
Other (<i>Please specify</i>):	0%

Table B.8.18 Vantage Boat Launch

	Yes
Campground (RV or tent)	40%
Location: <i>Silverwood, Vantage, Toward Sunland, Lake Tahoe, Walowe Lake, Yellowstone NP, Grand Teton National forest campground, Campel</i>	
Rented cabin/condo/home/motel/hotel	36.7%
Location: <i>Spokane Seattle, Vantage, Moses Lake, Ritzberg, Spokane, Pasco</i>	
Your own home/property	20%
Other (<i>Please specify</i>):	13.3%
Other Text: <i>On boat, Van, Visiting relative</i>	

Table B.8.19 Wanapum Dam Lower Boat Launch

	Yes
Campground (RV or tent)	10%
Location: <i>Sand Hollow</i>	
Rented cabin/condo/home/motel/hotel	10%
Location:	
Your own home/property	50%
Other (<i>Please specify</i>):	30%
Other Text: <i>Rest area, My friend's house, Live in Ellensburg (Commute)</i>	

Table B.8.20 Wanapum Dam Overlook

	Yes
Campground (RV or tent)	30%
Location: <i>Wanapum State Park, Lake Easton</i>	
Rented cabin/condo/home/motel/hotel	30%
Location: <i>Ellensburg, Port Townsend, Yakima</i>	
Your own home/property	10%
Other (<i>Please specify</i>):	40%
Other Text: <i>Just driving through, Hotel, sleep outside, friends</i>	

Table B.8.21 Wanapum Dam Upper Boat Launch

	Yes
Campground (RV or tent)	100%
Location:	
Rented cabin/condo/home/motel/hotel	0%
Location:	
Your own home/property	0%
Other (<i>Please specify</i>):	0%

Table B.8.22 Wanapum Recreation Area (WSP)

	Yes
Campground (RV or tent)	89.2%
Location: <i>Wanapum State Park, Wildhorse, Gorge, Silverwood Campground, Lake Chelan Vantage,</i>	
Rented cabin/condo/home/motel/hotel	10.8%
Location: <i>Spokane, Ritzville, WA, Moses Lake</i>	
Your own home/property	0%
Other (<i>Please specify</i>):	5.4%
Other Text: <i>Family</i>	

Table B.8.23 Wanapum Turbine Park

	Yes
Campground (RV or tent)	20%
Location: Jackson Creek Fish Camp	
Rented cabin/condo/home/motel/hotel	20%
Location: Walla Walla	
Your own home/property	40%
Other (<i>Please specify</i>):	20%
Other Text:	

Q.9 Site-level responses to the question

“Did any of the following conditions adversely affect your trip?”

Table B.9.1 Beverly Sand Dunes ORV Park

	Yes
Strong winds	0%
Lack of shade from the sun	100%
Low water levels	0%
Lack of shelter from the weather	0%
Lack of ADA accessibility	0%

Table B.9.2 Buckshot Recreation Area

	Yes
Strong winds	0%
Lack of shade from the sun	100%
Low water levels	0%
Lack of shelter from the weather	0%
Lack of ADA accessibility	0%

Table B.9.3 Burkett Lake Recreation Area

	Yes
Strong winds	0%
Lack of shade from the sun	100%
Low water levels	0%
Lack of shelter from the weather	0%
Lack of ADA accessibility	50%

Table B.9.4 CBRA

	Yes
Strong winds	37.0%
Lack of shade from the sun	48.1%
Low water levels	21.0%
Lack of shelter from the weather	9.9%
Lack of ADA accessibility	1.2%

Table B.9.5 Frenchman Coulee Recreation Area

	Yes
Strong winds	33.3%
Lack of shade from the sun	61.1%
Low water levels	11.1%
Lack of shelter from the weather	0.0%
Lack of ADA accessibility	5.6%

Table B.9.6 Huntzinger Road Boat Launch

	Yes
Strong winds	50.0%
Lack of shade from the sun	50.0%
Low water levels	0.0%
Lack of shelter from the weather	0.0%
Lack of ADA accessibility	0.0%

Table B.9.7 Jackson Creek Fish Camp

	Yes
Strong winds	0.0%
Lack of shade from the sun	100%
Low water levels	0.0%
Lack of shelter from the weather	0.0%
Lack of ADA accessibility	0.0%

Table B.9.8 PRRA

	Yes
Strong winds	86.1%
Lack of shade from the sun	19.4%
Low water levels	5.6%
Lack of shelter from the weather	5.6%
Lack of ADA accessibility	2.8%

Table B.9.9 Quilomene Dune & Bay

	Yes
Strong winds	59.6%
Lack of shade from the sun	31.9%
Low water levels	25.5%
Lack of shelter from the weather	4.3%
Lack of ADA accessibility	2.2%

Table B.9.10 Rattlesnake Cove

	Yes
Strong winds	25.0%
Lack of shade from the sun	50.0%
Low water levels	25.0%
Lack of shelter from the weather	0.0%
Lack of ADA accessibility	0.0%

Table B.9.11 Riverstone Resort

	Yes
Strong winds	66.7%
Lack of shade from the sun	33.3%
Low water levels	33.3%
Lack of shelter from the weather	33.3%
Lack of ADA accessibility	0.0%

Table B.9.12 Rocky Coulee

	Yes
Strong winds	66.7%
Lack of shade from the sun	37.5%
Low water levels	8.3%
Lack of shelter from the weather	8.3%
Lack of ADA accessibility	0.0%

Table B.9.13 Sand Hollow

	Yes
Strong winds	42.9%
Lack of shade from the sun	64.3%
Low water levels	21.4%
Lack of shelter from the weather	21.4%
Lack of ADA accessibility	3.6%

Table B.9.14 Sunland Boat Launch

	Yes
Strong winds	69.2%
Lack of shade from the sun	15.4%
Low water levels	30.8%
Lack of shelter from the weather	7.7%
Lack of ADA accessibility	7.7%

Table B.9.15 Sunland Picnic Area

	Yes
Strong winds	100%
Lack of shade from the sun	0.0%
Low water levels	50.0%
Lack of shelter from the weather	0.0%
Lack of ADA accessibility	0.0%

Table B.9.16 The Cove

	Yes
Strong winds	100%
Lack of shade from the sun	0.0%
Low water levels	0.0%
Lack of shelter from the weather	0.0%
Lack of ADA accessibility	0.0%

Table B.9.17 Vantage Boat Launch

	Yes
Strong winds	51.6%
Lack of shade from the sun	54.5%
Low water levels	6.5%
Lack of shelter from the weather	6.5%
Lack of ADA accessibility	0.0%

Table B.9.18 Wanapum Dam Lower Boat Launch

	Yes
Strong winds	57.1%
Lack of shade from the sun	57.1%
Low water levels	35.7%
Lack of shelter from the weather	14.3%
Lack of ADA accessibility	0.0%

Table B.9.19 Wanapum Dam Overlook

	Yes
Strong winds	60.0%
Lack of shade from the sun	40.0%
Low water levels	0.0%
Lack of shelter from the weather	0.0%
Lack of ADA accessibility	0.0%

Table B.9.20 Wanapum Dam Upper Boat Launch

	Yes
Strong winds	83.3%
Lack of shade from the sun	0.0%
Low water levels	16.7%
Lack of shelter from the weather	0.0%
Lack of ADA accessibility	0.0%

Table B.9.21 Wanapum Recreation Area (WSP)

	Yes
Strong winds	84.0%
Lack of shade from the sun	8.0%
Low water levels	20.0%
Lack of shelter from the weather	0.0%
Lack of ADA accessibility	4.0%

Table B.9.22 Wanapum Turbine Park

	Yes
Strong winds	66.7%
Lack of shade from the sun	33.3%
Low water levels	0.0%
Lack of shelter from the weather	0.0%
Lack of ADA accessibility	0.0%

Q10 Site-level responses to the question

“Grant PUD is interested in your opinion about the level of existing development and management at the reservoirs. Please indicate a response for any of the following facilities you used during your visit.”

Table B.10.1 Beverly Sand Dunes ORV Park

	Too High				About Right			Too Low		Mean	SD	DK	N
Number of picnic or day use areas	0%	0%	0%	0%	80%	0%	20%	0%	0%	5.4	0.9	0.0%	5
Quality of picnic or day use areas	0%	0%	0%	0%	80%	20%	0%	0%	0%	5.2	0.4	0.0%	5
Level of public recreation development	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	0	0.0%	4
Number of restrooms/toilets	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	0.0	0.0%	4
Amount of shoreline available for use	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	0.0	50.0%	4
Number of boat launches	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	-	75.0%	4
Quality of boat launches	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	-	75.0%	4
Number of swim/sunbathing areas	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	-	75.0%	4
Quality of swim/sunbathing areas	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	-	75.0%	4
Number of hiking trails	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	-	75.0%	4
Quality of hiking trails	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	-	75.0%	4
Number of public docks	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	-	75.0%	4
Quality of public docks	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	0	50.0%	4
Number of campsites	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	0	0.0%	5
Quality of campsites	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	0	0.0%	5
Cost to use facilities	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	0	20.0%	5
Quality of on-line campground reservation system	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	0	50.0%	4
Quality of restrooms/toilets	0%	0%	0%	25%	75%	0%	0%	0%	0%	4.8	0.5	0.0%	4

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.2 Buckshot Recreation Area

	Too High			About Right				Too Low		Mean	SD	DK	N
Number of swim/sunbathing areas	0%	0%	0%	0%	50%	0%	0%	50%	0%	6.5	2.1	0.0%	2
Quality of boat launches	0%	0%	0%	0%	50%	50%	0%	0%	0%	5.5	0.7	0.0%	2
Amount of shoreline available for use	50%	0%	0%	0%	0%	0%	0%	0%	50%	5.0	5.7	0.0%	2
Number of boat launches	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	-	0.0%	1
Quality of swim/sunbathing areas	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	-	0.0%	1
Number of hiking trails	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	-	0.0%	1
Quality of hiking trails	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	-	0.0%	1
Number of public docks	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	-	0.0%	1
Quality of public docks	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	-	0.0%	1
Number of campsites	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	-	0.0%	1
Quality of campsites	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	-	0.0%	1
Cost to use facilities	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	-	0.0%	1
Quality of on-line campground reservation system	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	-	0.0%	1
Level of public recreation development	50%	0%	0%	0%	0%	0%	50%	0%	0%	4.0	4.2	0.0%	2
Number of restrooms/toilets	100%	0%	0%	0%	0%	0%	0%	0%	0%	1.0	-	0.0%	1
Quality of restrooms/toilets	100%	0%	0%	0%	0%	0%	0%	0%	0%	1.0	-	0.0%	1
Number of picnic or day use areas	100%	0%	0%	0%	0%	0%	0%	0%	0%	1.0	-	0.0%	1
Quality of picnic or day use areas	100%	0%	0%	0%	0%	0%	0%	0%	0%	1.0	-	0.0%	1

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.3 Burkett Lake Recreation Area

	Too High			About Right			Too Low		Mean	SD	DK	N
Level of public recreation development	0%	0%	0%	0%	100%	0%	0%	0%	5.0	0.0	0.0%	2
Number of restrooms/toilets	0%	0%	0%	0%	100%	0%	0%	0%	5.0	0.0	0.0%	2
Quality of restrooms/toilets	0%	0%	0%	0%	100%	0%	0%	0%	5.0	0.0	0.0%	2
Number of picnic or day use areas	0%	0%	0%	0%	100%	0%	0%	0%	5.0	-	50.0%	2
Quality of picnic or day use areas	0%	0%	0%	0%	100%	0%	0%	0%	5.0	-	0.0%	1
Amount of shoreline available for use	0%	0%	0%	0%	100%	0%	0%	0%	5.0	0.0	0.0%	2
Number of boat launches	0%	0%	0%	0%	100%	0%	0%	0%	5.0	0.0	0.0%	2
Quality of boat launches	0%	0%	0%	0%	100%	0%	0%	0%	5.0	0.0	0.0%	2
Number of swim/sunbathing areas	0%	0%	0%	0%	100%	0%	0%	0%	5.0	0.0	0.0%	2
Quality of swim/sunbathing areas	0%	0%	0%	0%	100%	0%	0%	0%	5.0	0.0	0.0%	2
Number of hiking trails	0%	0%	0%	0%	100%	0%	0%	0%	5.0	-	50.0%	2
Quality of hiking trails	0%	0%	0%	0%	100%	0%	0%	0%	5.0	-	50.0%	2
Number of public docks	0%	0%	0%	0%	100%	0%	0%	0%	5.0	-	50.0%	2
Quality of public docks	0%	0%	0%	0%	100%	0%	0%	0%	5.0	-	50.0%	2
Number of campsites	0%	0%	0%	0%	100%	0%	0%	0%	5.0	-	50.0%	2
Quality of campsites	0%	0%	0%	0%	100%	0%	0%	0%	5.0	-	50.0%	2
Cost to use facilities	0%	0%	0%	0%	100%	0%	0%	0%	5.0	-	50.0%	2
Quality of on-line campground reservation system	0%	0%	0%	0%	100%	0%	0%	0%	5.0	-	50.0%	2

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.4 CBRA

	Too High		About Right				Too Low		Mean	SD	DK	N	
Number of restrooms/toilets	0.6%	0.6%	0.0%	0.6%	43.3%	9.6%	10.8%	8.3%	26.1%	6.6	1.8	6.0%	167
Quality of restrooms/toilets	0.7%	0.7%	1.4%	2.9%	43.2%	5.0%	17.3%	6.5%	22.3%	6.4	1.8	13.7%	161
Number of public docks	0.0%	0.8%	2.5%	1.7%	51.7%	5.9%	16.9%	5.9%	14.4%	6.1	1.6	25.3%	158
Quality of hiking trails	0.0%	0.0%	2.4%	8.4%	50.6%	8.4%	8.4%	6.0%	15.7%	5.9	1.7	44.7%	150
Number of hiking trails	2.2%	0.0%	3.3%	4.4%	52.2%	7.8%	7.8%	8.9%	13.3%	5.8	1.8	42.3%	156
Quality of public docks	0.0%	2.8%	2.8%	1.8%	58.7%	4.6%	8.3%	7.3%	13.8%	5.8	1.7	29.2%	154
Number of campsites	0.8%	1.6%	1.6%	3.3%	67.2%	3.3%	4.9%	5.7%	11.5%	5.6	1.6	22.8%	158
Number of boat launches	0.7%	1.5%	0.7%	4.4%	68.4%	7.4%	6.6%	2.9%	7.4%	5.5	1.4	15.5%	161
Quality of picnic or day use areas	0.7%	2.9%	1.4%	5.7%	64.3%	6.4%	8.6%	3.6%	6.4%	5.4	1.4	11.4%	158
Quality of boat launches	0.7%	1.5%	3.7%	4.5%	67.9%	6.0%	6.0%	3.0%	6.7%	5.3	1.4	15.7%	159
Quality of on-line campground reservation system	2.0%	2.0%	0.0%	4.1%	75.5%	3.1%	4.1%	2.0%	7.1%	5.3	1.4	38.4%	159
Quality of swim/sunbathing areas	2.7%	1.3%	6.7%	4.7%	58.7%	8.0%	7.3%	5.3%	5.3%	5.3	1.6	8.0%	163
Quality of campsites	0.9%	2.6%	3.5%	3.5%	67.8%	8.7%	5.2%	3.5%	4.3%	5.3	1.3	26.3%	156
Level of public recreation development	0.0%	2.0%	2.6%	3.3%	73.5%	8.6%	4.0%	1.3%	4.6%	5.2	1.2	4.4%	158
Number of swim/sunbathing areas	1.9%	0.0%	5.6%	5.6%	66.9%	5.0%	7.5%	3.8%	3.8%	5.2	1.4	4.8%	168
Number of picnic or day use areas	0.7%	0.7%	2.1%	7.8%	71.6%	6.4%	5.7%	1.4%	3.5%	5.2	1.1	12.4%	161
Amount of shoreline available for use	3.2%	3.2%	2.6%	6.5%	65.8%	6.5%	5.2%	3.2%	3.9%	5.1	1.5	5.5%	164
Cost to use facilities	8.4%	1.5%	6.9%	6.9%	71.8%	0.8%	0.8%	0.0%	3.1%	4.6	1.5	19.1%	162

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.5 Frenchman Coulee Recreation Area

	Too High			About Right				Too Low		Mean	SD	DK	N
Number of swim/sunbathing areas	0.0%	0.0%	0.0%	7.7%	50.0%	11.5%	23.1%	3.8%	3.8%	5.8	1.2	16.1%	31
Amount of shoreline available for use	0.0%	0.0%	3.6%	7.1%	50.0%	7.1%	17.9%	10.7%	3.6%	5.8	1.4	12.5%	32
Quality of campsites	5.9%	0.0%	0.0%	0.0%	58.8%	11.8%	11.8%	5.9%	5.9%	5.5	1.7	39.3%	28
Number of campsites	5.3%	0.0%	0.0%	5.3%	52.6%	10.5%	15.8%	5.3%	5.3%	5.5	1.7	34.5%	29
Quality of swim/sunbathing areas	4.0%	0.0%	0.0%	8.0%	56.0%	12.0%	12.0%	0.0%	8.0%	5.4	1.6	16.7%	30
Quality of on-line campground reservation system	0.0%	0.0%	0.0%	7.7%	69.2%	15.4%	0.0%	0.0%	7.7%	5.4	1.2	55.2%	29
Number of restrooms/toilets	0.0%	0.0%	0.0%	0.0%	85.7%	2.9%	8.6%	0.0%	2.9%	5.3	0.9	0.0%	35
Number of hiking trails	0.0%	0.0%	3.8%	3.8%	76.9%	3.8%	3.8%	0.0%	7.7%	5.3	1.3	13.3%	30
Number of boat launches	0.0%	0.0%	0.0%	0.0%	90.9%	0.0%	4.5%	0.0%	4.5%	5.3	0.9	29.0%	31
Quality of restrooms/toilets	0.0%	3.4%	10.3%	0.0%	75.9%	0.0%	3.4%	6.9%	0.0%	5.0	1.2	6.5%	31
Number of public docks	0.0%	5.0%	0.0%	5.0%	80.0%	10.0%	0.0%	0.0%	0.0%	4.9	0.8	31.0%	29
Quality of hiking trails	0.0%	0.0%	4.2%	12.5%	75.0%	8.3%	0.0%	0.0%	0.0%	4.9	0.6	17.2%	29
Number of picnic or day use areas	3.4%	3.4%	3.4%	0.0%	79.3%	3.4%	6.9%	0.0%	0.0%	4.9	1.2	6.5%	31
Quality of picnic or day use areas	0.0%	3.3%	6.7%	10.0%	70.0%	6.7%	3.3%	0.0%	0.0%	4.8	0.9	6.3%	32
Level of public recreation development	3.1%	3.1%	3.1%	3.1%	84.4%	0.0%	3.1%	0.0%	0.0%	4.8	1.0	3.0%	33
Quality of boat launches	0.0%	13.0%	4.3%	4.3%	73.9%	0.0%	0.0%	0.0%	4.3%	4.7	1.4	25.8%	31
Quality of public docks	5.0%	5.0%	5.0%	10.0%	70.0%	0.0%	0.0%	0.0%	5.0%	4.7	1.5	31.0%	29
Cost to use facilities	12.5%	0.0%	0.0%	4.2%	79.2%	0.0%	0.0%	0.0%	4.2%	4.6	1.6	20.0%	30

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.6 Huntzinger Road Boat Launch

	Too High			About Right				Too Low		Mean	SD	DK	N
Number of picnic or day use areas	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	66.7%	7.7	2.3	40.0%	5
Quality of picnic or day use areas	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	66.7%	7.7	2.3	40.0%	5
Number of public docks	0.0%	0.0%	0.0%	0.0%	66.7%	0.0%	0.0%	16.7%	16.7%	6.2	1.8	0.0%	6
Amount of shoreline available for use	0.0%	0.0%	0.0%	0.0%	80.0%	0.0%	20.0%	0.0%	0.0%	5.4	0.9	0.0%	5
Number of swim/sunbathing areas	0.0%	0.0%	0.0%	0.0%	66.7%	33.3%	0.0%	0.0%	0.0%	5.3	0.6	40.0%	5
Quality of swim/sunbathing areas	0.0%	0.0%	0.0%	0.0%	66.7%	33.3%	0.0%	0.0%	0.0%	5.3	0.6	40.0%	5
Level of public recreation development	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	0.0%	5
Number of restrooms/toilets	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	0.0%	6
Number of boat launches	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	0.0%	6
Number of hiking trails	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	60.0%	5
Quality of hiking trails	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	60.0%	5
Quality of public docks	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	0.0%	6
Number of campsites	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	60.0%	5
Quality of campsites	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	60.0%	5
Cost to use facilities	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	16.7%	6
Quality of on-line campground reservation system	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	50.0%	4
Quality of restrooms/toilets	0.0%	0.0%	16.7%	16.7%	66.7%	0.0%	0.0%	0.0%	0.0%	4.5	0.8	0.0%	6
Quality of restrooms/toilets	0.0%	0.0%	12.5%	12.5%	75.0%	0.0%	0.0%	0.0%	0.0%	4.6	0.7	0.0%	8

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.7 Huntzinger Road Fishing Access Site

	Too High			About Right				Too Low		Mean	SD	DK	N
Amount of shoreline available for use	0%	0%	0%	0%	0%	0%	0%	0%	100%	9.0	0.0	0%	2
Number of public docks	0%	0%	0%	0%	0%	0%	0%	0%	100%	9.0	0.0	0%	2
Quality of boat launches	0%	0%	0%	0%	0%	0%	0%	100%	0%	8.0	-	50%	2
Level of public recreation development	50%	0%	0%	0%	0%	0%	0%	0%	50%	5.0	5.7	0%	2
Number of restrooms/toilets	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	0.0	0%	2
Quality of restrooms/toilets	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	0.0	0%	2
Number of boat launches	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	-	50%	2
Quality of public docks	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	-	50%	2
Cost to use facilities	0%	0%	0%	0%	100%	0%	0%	0%	0%	5.0	0.0	0%	2
Number of picnic or day use areas	-	-	-	-	-	-	-	-	-	-	-	100%	1
Quality of picnic or day use areas	-	-	-	-	-	-	-	-	-	-	-	100%	1
Number of swim/sunbathing areas	-	-	-	-	-	-	-	-	-	-	-	100%	1
Quality of swim/sunbathing areas	-	-	-	-	-	-	-	-	-	-	-	100%	1
Number of hiking trails												100%	1
Quality of hiking trails	-	-	-	-	-	-	-	-	-	-	-	100%	1
Number of campsites	-	-	-	-	-	-	-	-	-	-	-	100%	1
Quality of campsites	-	-	-	-	-	-	-	-	-	-	-	100%	1

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.8 Jackson Creek Fish Camp

	Too High		About Right				Too Low		Mean	SD	DK	N	
Number of restrooms/toilets	0.0%	0.0%	0.0%	0.0%	80.0%	0.0%	0.0%	0.0%	20.0%	5.8	1.8	0.0%	5
Level of public recreation development	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	0.0%	5
Quality of restrooms/toilets	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	20.0%	5
Number of picnic or day use areas	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	20.0%	5
Quality of picnic or day use areas	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	20.0%	5
Amount of shoreline available for use	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	20.0%	5
Number of boat launches	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	20.0%	5
Quality of boat launches	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	20.0%	5
Number of swim/sunbathing areas	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	20.0%	5
Quality of swim/sunbathing areas	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	20.0%	5
Number of hiking trails	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	20.0%	5
Quality of hiking trails	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	20.0%	5
Number of public docks	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	20.0%	5
Quality of public docks	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	20.0%	5
Number of campsites	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	0.0%	4
Quality of campsites	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	20.0%	5
Cost to use facilities	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	20.0%	5
Quality of on-line campground reservation system	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	20.0%	5

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.9 PRRA

	Too High			About Right				Too Low		Mean	SD	DK	N
Amount of shoreline available for use	1.9%	0.0%	0.0%	3.8%	64.2%	3.8%	9.4%	0.0%	17.0%	5.8	1.7	1.9%	54
Number of restrooms/toilets	0.0%	1.8%	1.8%	0.0%	68.4%	3.5%	14.0%	1.8%	8.8%	5.6	1.4	3.4%	59
Number of public docks	0.0%	3.9%	3.9%	2.0%	66.7%	2.0%	5.9%	5.9%	9.8%	5.5	1.6	10.5%	57
Number of hiking trails	0.0%	2.3%	9.3%	2.3%	55.8%	2.3%	16.3%	4.7%	7.0%	5.5	1.6	20.4%	54
Number of campsites	0.0%	2.3%	0.0%	2.3%	79.1%	2.3%	2.3%	4.7%	7.0%	5.4	1.3	20.4%	54
Number of swim/sunbathing areas	0.0%	0.0%	6.0%	0.0%	68.0%	8.0%	14.0%	2.0%	2.0%	5.4	1.1	9.1%	55
Quality of restrooms/toilets	0.0%	1.9%	5.6%	0.0%	68.5%	11.1%	5.6%	1.9%	5.6%	5.3	1.3	6.9%	58
Quality of swim/sunbathing areas	0.0%	0.0%	4.0%	4.0%	70.0%	4.0%	18.0%	0.0%	0.0%	5.3	0.9	10.7%	56
Quality of on-line campground reservation system	0.0%	3.0%	0.0%	6.1%	75.8%	6.1%	6.1%	0.0%	3.0%	5.2	1.1	38.9%	54
Quality of public docks	0.0%	4.2%	10.4%	2.1%	68.8%	4.2%	2.1%	4.2%	4.2%	5.0	1.4	11.1%	54
Cost to use facilities	0.0%	0.0%	0.0%	2.1%	95.8%	2.1%	0.0%	0.0%	0.0%	5.0	0.2	14.3%	56
Number of boat launches	0.0%	1.8%	5.5%	3.6%	78.2%	3.6%	7.3%	0.0%	0.0%	5.0	0.9	3.5%	57
Quality of campsites	0.0%	2.4%	4.9%	0.0%	82.9%	7.3%	0.0%	2.4%	0.0%	5.0	0.9	24.1%	54
Quality of hiking trails	0.0%	4.7%	7.0%	2.3%	74.4%	2.3%	7.0%	0.0%	2.3%	5.0	1.2	17.3%	52
Number of picnic or day use areas	2.0%	3.9%	0.0%	5.9%	84.3%	0.0%	0.0%	0.0%	3.9%	4.9	1.2	8.9%	56
Level of public recreation development	1.8%	1.8%	3.6%	0.0%	87.3%	5.5%	0.0%	0.0%	0.0%	4.9	0.8	6.8%	59
Quality of picnic or day use areas	0.0%	4.0%	6.0%	10.0%	76.0%	2.0%	2.0%	0.0%	0.0%	4.7	0.9	9.1%	55
Quality of boat launches	1.8%	5.5%	14.5%	7.3%	69.1%	1.8%	0.0%	0.0%	0.0%	4.4	1.1	5.2%	58

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.10 Quilomene Dune & Bay

	Too High			About Right			Too Low			Mean	SD	DK	N
Number of restrooms/toilets	1.1%	0.0%	0.0%	0.0%	37.4%	8.8%	6.6%	5.5%	40.7%	7.0	1.9	10.8%	102
Number of public docks	1.2%	2.4%	1.2%	1.2%	39.3%	2.4%	10.7%	11.9%	29.8%	6.6	2.0	16.0%	100
Quality of restrooms/toilets	2.5%	0.0%	0.0%	1.3%	48.8%	6.3%	7.5%	2.5%	31.3%	6.4	2.0	19.2%	99
Quality of public docks	2.4%	0.0%	3.6%	6.0%	44.6%	1.2%	8.4%	9.6%	24.1%	6.2	2.1	17.8%	101
Number of campsites	1.4%	0.0%	5.6%	1.4%	59.2%	1.4%	2.8%	7.0%	21.1%	5.9	1.9	26.8%	97
Number of boat launches	2.0%	1.0%	3.0%	2.0%	58.6%	2.0%	8.1%	5.1%	18.2%	5.9	1.9	3.9%	103
Number of picnic or day use areas	3.4%	1.1%	2.3%	3.4%	54.0%	5.7%	4.6%	5.7%	19.5%	5.9	2.0	14.7%	102
Amount of shoreline available for use	2.0%	2.0%	2.0%	3.0%	58.0%	2.0%	10.0%	2.0%	19.0%	5.8	1.9	0.0%	100
Quality of hiking trails	3.5%	3.5%	0.0%	1.8%	59.6%	7.0%	1.8%	1.8%	21.1%	5.7	2.0	41.2%	97
Number of hiking trails	6.5%	3.2%	3.2%	1.6%	45.2%	8.1%	12.9%	0.0%	19.4%	5.7	2.2	39.2%	102
Quality of boat launches	2.0%	4.0%	3.0%	6.1%	55.6%	4.0%	6.1%	5.1%	14.1%	5.6	1.9	3.9%	103
Number of swim/sunbathing areas	2.0%	3.1%	4.1%	1.0%	57.1%	6.1%	16.3%	5.1%	5.1%	5.5	1.6	3.0%	101
Quality of on-line campground reservation system	2.1%	0.0%	2.1%	0.0%	72.9%	2.1%	12.5%	2.1%	6.3%	5.5	1.4	51.5%	99
Level of public recreation development	3.3%	2.2%	0.0%	3.3%	68.1%	4.4%	5.5%	2.2%	11.0%	5.4	1.7	6.2%	97
Quality of swim/sunbathing areas	2.1%	1.0%	4.2%	4.2%	61.5%	5.2%	10.4%	6.3%	5.2%	5.4	1.5	3.0%	99
Quality of picnic or day use areas	3.6%	3.6%	2.4%	4.8%	58.3%	6.0%	8.3%	0.0%	13.1%	5.4	1.8	16.8%	101
Quality of campsites	3.0%	1.5%	7.6%	0.0%	65.2%	1.5%	4.5%	6.1%	10.6%	5.4	1.8	32.7%	98
Cost to use facilities	11.3%	1.3%	6.3%	5.0%	70.0%	0.0%	1.3%	0.0%	5.0%	4.6	1.7	20.0%	100

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.11 Rattlesnake Cove

	Too High			About Right				Too Low			Mean	SD	DK	N
Amount of shoreline available for use	20.0%	0.0%	0.0%	10.0%	30.0%	10.0%	20.0%	10.0%	0.0%	4.9	2.4	9.1%	11	
Number of boat launches	12.5%	0.0%	0.0%	0.0%	75.0%	0.0%	12.5%	0.0%	0.0%	4.8	1.7	27.3%	11	
Number of swim/sunbathing areas	20.0%	0.0%	0.0%	10.0%	40.0%	10.0%	10.0%	10.0%	0.0%	4.7	2.3	9.1%	11	
Level of public recreation development	12.5%	0.0%	0.0%	0.0%	75.0%	12.5%	0.0%	0.0%	0.0%	4.6	1.5	11.1%	9	
Number of restrooms/toilets	10.0%	0.0%	0.0%	10.0%	80.0%	0.0%	0.0%	0.0%	0.0%	4.5	1.3	9.1%	11	
Quality of swim/sunbathing areas	22.2%	0.0%	11.1%	0.0%	44.4%	0.0%	11.1%	11.1%	0.0%	4.4	2.4	10.0%	10	
Quality of restrooms/toilets	12.5%	0.0%	12.5%	12.5%	50.0%	0.0%	12.5%	0.0%	0.0%	4.4	1.8	27.3%	11	
Number of picnic or day use areas	12.5%	0.0%	0.0%	25.0%	50.0%	12.5%	0.0%	0.0%	0.0%	4.4	1.5	20.0%	10	
Quality of boat launches	16.7%	0.0%	0.0%	0.0%	83.3%	0.0%	0.0%	0.0%	0.0%	4.3	1.6	45.5%	11	
Quality of picnic or day use areas	10.0%	0.0%	0.0%	40.0%	50.0%	0.0%	0.0%	0.0%	0.0%	4.2	1.2	9.1%	11	
Quality of public docks	20.0%	0.0%	0.0%	0.0%	80.0%	0.0%	0.0%	0.0%	0.0%	4.2	1.8	50.0%	10	
Number of campsites	16.7%	0.0%	0.0%	16.7%	66.7%	0.0%	0.0%	0.0%	0.0%	4.2	1.6	45.5%	11	
Quality of campsites	16.7%	0.0%	0.0%	16.7%	66.7%	0.0%	0.0%	0.0%	0.0%	4.2	1.6	45.5%	11	
Cost to use facilities	14.3%	0.0%	0.0%	28.6%	57.1%	0.0%	0.0%	0.0%	0.0%	4.1	1.5	36.4%	11	
Number of public docks	20.0%	0.0%	0.0%	20.0%	60.0%	0.0%	0.0%	0.0%	0.0%	4.0	1.7	54.5%	11	
Quality of on-line campground reservation system	20.0%	0.0%	0.0%	20.0%	60.0%	0.0%	0.0%	0.0%	0.0%	4.0	1.7	54.5%	11	
Quality of hiking trails	25.0%	0.0%	0.0%	25.0%	50.0%	0.0%	0.0%	0.0%	0.0%	3.8	1.9	63.6%	11	
Number of hiking trails	40.0%	0.0%	20.0%	0.0%	40.0%	0.0%	0.0%	0.0%	0.0%	3.0	2.0	54.5%	11	

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.12 Riverstone Resort

	Too High			About Right				Too Low		Mean	SD	DK	N
Number of restrooms/toilets	0.0%	10.0%	0.0%	0.0%	40.0%	20.0%	10.0%	10.0%	10.0%	5.8	1.9	9.1%	11
Quality of public docks	0.0%	0.0%	0.0%	0.0%	80.0%	0.0%	0.0%	0.0%	20.0%	5.8	1.7	9.1%	11
Quality of on-line campground reservation system	0.0%	0.0%	0.0%	0.0%	83.3%	0.0%	0.0%	0.0%	16.7%	5.7	1.6	40.0%	10
Quality of campsites	0.0%	14.3%	0.0%	0.0%	57.1%	0.0%	14.3%	0.0%	14.3%	5.4	2.1	30.0%	10
Quality of swim/sunbathing areas	0.0%	0.0%	0.0%	10.0%	60.0%	10.0%	20.0%	0.0%	0.0%	5.4	1.0	9.1%	11
Number of public docks	0.0%	10.0%	0.0%	0.0%	70.0%	0.0%	10.0%	0.0%	10.0%	5.3	1.8	9.1%	11
Number of picnic or day use areas	0.0%	10.0%	0.0%	0.0%	60.0%	10.0%	20.0%	0.0%	0.0%	5.2	1.4	0.0%	10
Number of campsites	0.0%	16.7%	0.0%	0.0%	66.7%	0.0%	0.0%	0.0%	16.7%	5.2	2.2	33.3%	9
Number of hiking trails	0.0%	14.3%	0.0%	0.0%	71.4%	0.0%	0.0%	0.0%	14.3%	5.1	2.0	30.0%	10
Number of boat launches	0.0%	12.5%	0.0%	0.0%	75.0%	0.0%	0.0%	0.0%	12.5%	5.1	1.9	20.0%	10
Amount of shoreline available for use	0.0%	9.1%	0.0%	0.0%	81.8%	0.0%	0.0%	9.1%	0.0%	5.0	1.3	0.0%	11
Quality of boat launches	0.0%	14.3%	0.0%	14.3%	57.1%	0.0%	0.0%	0.0%	14.3%	5.0	2.1	22.2%	9
Number of swim/sunbathing areas	0.0%	11.1%	0.0%	0.0%	66.7%	11.1%	11.1%	0.0%	0.0%	5.0	1.3	18.2%	11
Quality of hiking trails	0.0%	16.7%	0.0%	33.3%	33.3%	0.0%	0.0%	0.0%	16.7%	4.8	2.3	33.3%	9
Quality of picnic or day use areas	0.0%	9.1%	0.0%	9.1%	72.7%	9.1%	0.0%	0.0%	0.0%	4.7	1.0	0.0%	11
Cost to use facilities	0.0%	11.1%	0.0%	0.0%	88.9%	0.0%	0.0%	0.0%	0.0%	4.7	1.0	18.2%	11
Quality of restrooms/toilets	0.0%	14.3%	0.0%	0.0%	85.7%	0.0%	0.0%	0.0%	0.0%	4.6	1.1	12.5%	8
Level of public recreation development	10.0%	10.0%	0.0%	0.0%	80.0%	0.0%	0.0%	0.0%	0.0%	4.3	1.5	9.1%	11

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.13 Rocky Coulee

	Too High		About Right				Too Low		Mean	SD	DK	N	
Number of swim/sunbathing areas	0.0%	0.0%	3.2%	9.7%	45.2%	9.7%	9.7%	9.7%	12.9%	5.9	1.7	16.2%	37
Amount of shoreline available for use	0.0%	0.0%	9.1%	12.1%	54.5%	3.0%	3.0%	6.1%	12.1%	5.5	1.7	5.7%	35
Quality of swim/sunbathing areas	0.0%	3.6%	3.6%	3.6%	67.9%	7.1%	10.7%	0.0%	3.6%	5.2	1.3	20.0%	35
Number of picnic or day use areas	0.0%	3.0%	3.0%	9.1%	63.6%	9.1%	6.1%	3.0%	3.0%	5.2	1.3	8.3%	36
Number of boat launches	0.0%	0.0%	0.0%	10.0%	80.0%	0.0%	10.0%	0.0%	0.0%	5.1	0.7	39.4%	33
Number of campsites	0.0%	0.0%	0.0%	10.7%	78.6%	7.1%	0.0%	3.6%	0.0%	5.1	0.7	20.0%	35
Quality of picnic or day use areas	6.3%	0.0%	6.3%	3.1%	62.5%	6.3%	12.5%	3.1%	0.0%	5.0	1.5	5.9%	34
Number of public docks	0.0%	0.0%	0.0%	9.5%	85.7%	0.0%	4.8%	0.0%	0.0%	5.0	0.5	38.2%	34
Quality of public docks	0.0%	0.0%	0.0%	9.5%	85.7%	4.8%	0.0%	0.0%	0.0%	5.0	0.4	36.4%	33
Quality of on-line campground reservation system	0.0%	0.0%	0.0%	12.5%	81.3%	6.3%	0.0%	0.0%	0.0%	4.9	0.4	52.9%	34
Number of hiking trails	0.0%	0.0%	7.1%	14.3%	64.3%	7.1%	7.1%	0.0%	0.0%	4.9	0.9	24.3%	37
Number of restrooms/toilets	0.0%	2.6%	2.6%	7.9%	78.9%	2.6%	5.3%	0.0%	0.0%	4.9	0.8	2.6%	39
Quality of boat launches	0.0%	0.0%	10.5%	10.5%	73.7%	0.0%	5.3%	0.0%	0.0%	4.8	0.9	40.6%	32
Quality of hiking trails	7.7%	3.8%	0.0%	7.7%	65.4%	11.5%	0.0%	0.0%	3.8%	4.8	1.6	27.8%	36
Cost to use facilities	0.0%	3.8%	0.0%	11.5%	84.6%	0.0%	0.0%	0.0%	0.0%	4.8	0.7	25.7%	35
Quality of campsites	7.1%	0.0%	0.0%	7.1%	78.6%	3.6%	3.6%	0.0%	0.0%	4.8	1.2	20.0%	35
Level of public recreation development	5.7%	0.0%	0.0%	17.1%	68.6%	2.9%	5.7%	0.0%	0.0%	4.7	1.1	5.4%	37
Quality of restrooms/toilets	8.6%	2.9%	5.7%	5.7%	77.1%	0.0%	0.0%	0.0%	0.0%	4.4	1.3	10.3%	39

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.14 Sand Hollow

	Too High		About Right					Too Low		Mean	SD	DK	N
Quality of restrooms/toilets	0.0%	0.0%	5.9%	5.9%	50.0%	5.9%	11.8%	5.9%	14.7%	5.9	1.7	5.6%	36
Number of boat launches	0.0%	0.0%	5.9%	0.0%	70.6%	0.0%	0.0%	5.9%	17.6%	5.8	1.8	43.3%	30
Number of public docks	0.0%	0.0%	7.1%	0.0%	71.4%	0.0%	7.1%	0.0%	14.3%	5.6	1.7	51.7%	29
Quality of public docks	0.0%	0.0%	7.7%	0.0%	76.9%	0.0%	0.0%	0.0%	15.4%	5.5	1.7	53.6%	28
Number of campsites	3.7%	0.0%	3.7%	3.7%	66.7%	0.0%	7.4%	3.7%	11.1%	5.4	1.8	6.9%	29
Quality of hiking trails	4.3%	0.0%	4.3%	0.0%	69.6%	0.0%	4.3%	8.7%	8.7%	5.4	1.8	20.7%	29
Quality of campsites	0.0%	0.0%	3.7%	11.1%	63.0%	3.7%	11.1%	0.0%	7.4%	5.4	1.4	10.0%	30
Amount of shoreline available for use	0.0%	0.0%	7.1%	10.7%	57.1%	7.1%	7.1%	3.6%	7.1%	5.4	1.5	9.7%	31
Number of hiking trails	8.0%	0.0%	4.0%	0.0%	64.0%	0.0%	8.0%	8.0%	8.0%	5.3	2.0	16.7%	30
Quality of boat launches	0.0%	0.0%	12.5%	0.0%	68.8%	6.3%	0.0%	0.0%	12.5%	5.3	1.6	44.8%	29
Quality of swim/sunbathing areas	0.0%	0.0%	7.7%	3.8%	73.1%	0.0%	3.8%	3.8%	7.7%	5.3	1.4	16.1%	31
Quality of picnic or day use areas	0.0%	0.0%	6.9%	3.4%	72.4%	6.9%	0.0%	3.4%	6.9%	5.3	1.3	6.5%	31
Quality of on-line campground reservation system	0.0%	0.0%	11.8%	0.0%	70.6%	5.9%	5.9%	0.0%	5.9%	5.2	1.3	39.3%	28
Number of swim/sunbathing areas	0.0%	0.0%	8.0%	8.0%	72.0%	0.0%	4.0%	0.0%	8.0%	5.2	1.4	16.7%	30
Number of restrooms/toilets	0.0%	0.0%	2.9%	2.9%	82.9%	2.9%	8.6%	0.0%	0.0%	5.1	0.7	2.8%	36
Level of public recreation development	7.7%	0.0%	0.0%	7.7%	69.2%	3.8%	3.8%	0.0%	7.7%	5.0	1.7	10.3%	29
Number of picnic or day use areas	6.1%	0.0%	6.1%	0.0%	78.8%	3.0%	3.0%	3.0%	0.0%	4.8	1.3	0.0%	33
Cost to use facilities	10.3%	3.4%	3.4%	0.0%	82.8%	0.0%	0.0%	0.0%	0.0%	4.4	1.4	6.5%	31

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.15 Sunland Boat Launch

	Too High			About Right				Too Low		Mean	SD	DK	N
Number of public docks	5.0%	0.0%	0.0%	0.0%	40.0%	0.0%	10.0%	5.0%	40.0%	6.8	2.3	4.8%	21
Quality of public docks	5.6%	0.0%	0.0%	0.0%	44.4%	0.0%	16.7%	0.0%	33.3%	6.4	2.3	10.0%	20
Quality of boat launches	4.3%	0.0%	0.0%	4.3%	47.8%	0.0%	8.7%	4.3%	30.4%	6.3	2.2	0.0%	23
Quality of hiking trails	5.3%	0.0%	0.0%	0.0%	57.9%	5.3%	5.3%	5.3%	21.1%	5.9	2.1	9.5%	21
Number of boat launches	4.8%	0.0%	0.0%	0.0%	66.7%	0.0%	4.8%	9.5%	14.3%	5.8	1.9	4.5%	22
Amount of shoreline available for use	5.0%	0.0%	5.0%	0.0%	65.0%	0.0%	5.0%	0.0%	20.0%	5.6	2.1	0.0%	20
Number of hiking trails	5.9%	0.0%	0.0%	0.0%	70.6%	0.0%	5.9%	0.0%	17.6%	5.6	2.0	10.5%	19
Number of swim/sunbathing areas	5.0%	0.0%	0.0%	5.0%	70.0%	5.0%	0.0%	5.0%	10.0%	5.4	1.7	0.0%	20
Quality of swim/sunbathing areas	5.0%	0.0%	5.0%	0.0%	75.0%	0.0%	0.0%	0.0%	15.0%	5.3	1.9	0.0%	20
Number of restrooms/toilets	4.5%	0.0%	0.0%	0.0%	77.3%	9.1%	0.0%	4.5%	4.5%	5.2	1.4	0.0%	22
Quality of restrooms/toilets	4.5%	0.0%	4.5%	4.5%	68.2%	4.5%	4.5%	4.5%	4.5%	5.1	1.6	0.0%	22
Quality of on-line campground reservation system	10.0%	0.0%	0.0%	0.0%	60.0%	20.0%	0.0%	10.0%	0.0%	5.1	1.7	44.4%	18
Quality of campsites	7.7%	0.0%	7.7%	7.7%	61.5%	0.0%	0.0%	0.0%	15.4%	5.1	2.1	27.8%	18
Number of campsites	6.7%	0.0%	6.7%	6.7%	60.0%	0.0%	13.3%	0.0%	6.7%	5.1	1.8	25.0%	20
Number of picnic or day use areas	5.0%	0.0%	15.0%	10.0%	55.0%	0.0%	0.0%	0.0%	15.0%	5.0	2.0	4.8%	21
Quality of picnic or day use areas	5.0%	0.0%	10.0%	5.0%	70.0%	0.0%	0.0%	0.0%	10.0%	5.0	1.7	0.0%	20
Cost to use facilities	14.3%	0.0%	0.0%	0.0%	64.3%	14.3%	0.0%	7.1%	0.0%	4.8	1.8	26.3%	19
Level of public recreation development	20.0%	0.0%	5.0%	5.0%	45.0%	10.0%	0.0%	0.0%	15.0%	4.8	2.5	0.0%	20

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.16 Sunland Picnic Area

	Too High		About Right				Too Low		Mean	SD	DK	N	
Number of public docks	0.0%	0.0%	0.0%	0.0%	33.3%	33.3%	0.0%	0.0%	33.3%	6.7	1.9	25.0%	8
Quality of public docks	0.0%	0.0%	0.0%	0.0%	33.3%	33.3%	0.0%	0.0%	33.3%	6.7	1.9	25.0%	8
Quality of hiking trails	0.0%	0.0%	0.0%	0.0%	42.9%	0.0%	28.6%	14.3%	14.3%	6.6	1.6	12.5%	8
Number of restrooms/toilets	0.0%	0.0%	0.0%	0.0%	62.5%	0.0%	37.5%	0.0%	0.0%	5.8	1.0	0.0%	8
Number of campsites	0.0%	0.0%	0.0%	0.0%	71.4%	14.3%	0.0%	0.0%	14.3%	5.7	1.5	12.5%	8
Quality of campsites	0.0%	0.0%	0.0%	0.0%	83.3%	0.0%	0.0%	0.0%	16.7%	5.7	1.6	25.0%	8
Number of hiking trails	0.0%	0.0%	0.0%	0.0%	60.0%	20.0%	20.0%	0.0%	0.0%	5.6	0.9	28.6%	7
Quality of swim/sunbathing areas	0.0%	0.0%	0.0%	0.0%	87.5%	0.0%	0.0%	0.0%	12.5%	5.5	1.4	0.0%	8
Quality of boat launches	0.0%	0.0%	0.0%	20.0%	60.0%	0.0%	0.0%	20.0%	0.0%	5.4	1.5	37.5%	8
Number of picnic or day use areas	0.0%	0.0%	0.0%	12.5%	75.0%	0.0%	0.0%	0.0%	12.5%	5.4	1.5	0.0%	8
Quality of picnic or day use areas	0.0%	0.0%	12.5%	12.5%	62.5%	0.0%	0.0%	0.0%	12.5%	5.1	1.7	0.0%	8
Level of public recreation development	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	0.0%	8
Number of swim/sunbathing areas	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	12.5%	8
Cost to use facilities	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	25.0%	8
Quality of on-line campground reservation system	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	50.0%	8
Number of boat launches	0.0%	0.0%	0.0%	20.0%	80.0%	0.0%	0.0%	0.0%	0.0%	4.8	0.4	37.5%	8
Quality of restrooms/toilets	12.5%	0.0%	0.0%	0.0%	75.0%	0.0%	12.5%	0.0%	0.0%	4.8	1.7	0.0%	8
Amount of shoreline available for use	0.0%	0.0%	12.5%	12.5%	62.5%	12.5%	0.0%	0.0%	0.0%	4.8	0.9	0.0%	8

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.17 The Cove

	Too High				About Right			Too Low		Mean	SD	DK	N
Quality of hiking trails	0.0%	0.0%	0.0%	0.0%	25.0%	25.0%	0.0%	0.0%	50.0%	7.3	2.1	20.0%	5
Number of hiking trails	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	50.0%	7.0	2.3	20.0%	5
Quality of on-line campground reservation system	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	50.0%	7.0	2.8	60.0%	5
Number of boat launches	0.0%	0.0%	0.0%	0.0%	66.7%	0.0%	0.0%	33.3%	0.0%	6.0	1.7	25.0%	4
Cost to use facilities	0.0%	0.0%	0.0%	0.0%	80.0%	0.0%	0.0%	0.0%	20.0%	5.8	1.8	0.0%	5
Number of campsites	0.0%	0.0%	0.0%	0.0%	66.7%	0.0%	33.3%	0.0%	0.0%	5.7	1.2	40.0%	5
Quality of public docks	0.0%	0.0%	0.0%	0.0%	75.0%	0.0%	25.0%	0.0%	0.0%	5.5	1.0	20.0%	5
Number of swim/sunbathing areas	0.0%	0.0%	0.0%	0.0%	80.0%	0.0%	20.0%	0.0%	0.0%	5.4	0.9	0.0%	5
Quality of swim/sunbathing areas	0.0%	0.0%	0.0%	0.0%	80.0%	0.0%	20.0%	0.0%	0.0%	5.4	0.9	0.0%	5
Amount of shoreline available for use	0.0%	0.0%	0.0%	0.0%	80.0%	20.0%	0.0%	0.0%	0.0%	5.2	0.4	0.0%	5
Level of public recreation development	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	0.0%	5
Number of restrooms/toilets	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	0.0%	6
Quality of picnic or day use areas	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	20.0%	5
Quality of swim/sunbathing areas	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	20.0%	5
Number of hiking trails	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	40.0%	5
Quality of campsites	0.0%	0.0%	16.7%	0.0%	83.3%	0.0%	0.0%	0.0%	0.0%	4.7	0.8	0.0%	6
Cost to use facilities	0.0%	0.0%	16.7%	0.0%	83.3%	0.0%	0.0%	0.0%	0.0%	4.7	0.8	0.0%	6

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.18 Vantage Boat Launch

	Too High			About Right				Too Low		Mean	SD	DK	N
Number of hiking trails	0.0%	0.0%	0.0%	0.0%	53.3%	20.0%	10.0%	3.3%	13.3%	6.0	1.4	47.4%	57
Quality of hiking trails	0.0%	0.0%	0.0%	3.6%	46.4%	25.0%	14.3%	0.0%	10.7%	5.9	1.3	50.9%	57
Number of swim/sunbathing areas	0.0%	0.0%	0.0%	2.0%	58.0%	6.0%	22.0%	8.0%	4.0%	5.9	1.3	19.4%	62
Number of campsites	0.0%	0.0%	0.0%	0.0%	66.7%	6.7%	13.3%	0.0%	13.3%	5.9	1.4	47.4%	57
Amount of shoreline available for use	0.0%	1.9%	3.8%	1.9%	50.0%	13.5%	17.3%	5.8%	5.8%	5.7	1.5	13.3%	60
Quality of swim/sunbathing areas	0.0%	2.1%	4.2%	2.1%	62.5%	12.5%	6.3%	4.2%	6.3%	5.5	1.4	21.3%	61
Number of public docks	0.0%	0.0%	2.2%	8.7%	63.0%	6.5%	8.7%	8.7%	2.2%	5.5	1.2	23.3%	60
Number of restrooms/toilets	0.0%	0.0%	0.0%	0.0%	80.3%	3.0%	12.1%	1.5%	3.0%	5.4	1.0	4.3%	69
Quality of restrooms/toilets	0.0%	0.0%	3.4%	3.4%	72.4%	1.7%	10.3%	3.4%	5.2%	5.4	1.3	9.4%	64
Quality of campsites	0.0%	0.0%	0.0%	3.4%	79.3%	10.3%	0.0%	0.0%	6.9%	5.3	1.1	50.8%	59
Quality of on-line campground reservation system	0.0%	0.0%	4.2%	4.2%	79.2%	0.0%	4.2%	0.0%	8.3%	5.3	1.3	57.9%	57
Number of picnic or day use areas	0.0%	0.0%	3.8%	0.0%	75.5%	9.4%	7.5%	3.8%	0.0%	5.3	0.9	11.7%	60
Quality of picnic or day use areas	0.0%	0.0%	4.0%	2.0%	78.0%	6.0%	6.0%	2.0%	2.0%	5.2	1.0	12.3%	57
Level of public recreation development	0.0%	0.0%	1.7%	5.0%	85.0%	3.3%	0.0%	0.0%	5.0%	5.2	1.0	7.7%	65
Quality of public docks	0.0%	2.2%	4.3%	10.9%	69.6%	4.3%	2.2%	4.3%	2.2%	5.0	1.2	22.0%	59
Number of boat launches	0.0%	0.0%	7.7%	3.8%	80.8%	3.8%	0.0%	0.0%	3.8%	5.0	1.0	14.8%	61
Cost to use facilities	5.7%	0.0%	5.7%	0.0%	88.6%	0.0%	0.0%	0.0%	0.0%	4.7	1.0	38.6%	57
Quality of boat launches	3.9%	7.8%	13.7%	5.9%	64.7%	2.0%	2.0%	0.0%	0.0%	4.3	1.3	17.7%	62

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.19 Wanapum Dam Lower Boat Launch

	Too High				About Right			Too Low		Mean	SD	DK	N
Level of public recreation development	0.0%	0.0%	5.3%	0.0%	84.2%	0.0%	5.3%	5.3%	0.0%	5.2	1.0	9.5%	21
Number of restrooms/toilets	0.0%	4.8%	0.0%	0.0%	85.7%	9.5%	0.0%	0.0%	0.0%	5.0	0.7	4.5%	22
Quality of restrooms/toilets	9.1%	0.0%	0.0%	9.1%	63.6%	4.5%	4.5%	0.0%	9.1%	5.0	1.8	4.3%	23
Number of picnic or day use areas	0.0%	0.0%	0.0%	5.3%	73.7%	10.5%	5.3%	0.0%	5.3%	5.4	1.1	13.6%	22
Quality of picnic or day use areas	5.6%	0.0%	0.0%	0.0%	88.9%	0.0%	0.0%	5.6%	0.0%	4.9	1.2	14.3%	21
Amount of shoreline available for use	5.0%	0.0%	0.0%	5.0%	70.0%	5.0%	10.0%	0.0%	5.0%	5.2	1.5	4.8%	21
Number of boat launches	0.0%	0.0%	0.0%	0.0%	73.7%	5.3%	5.3%	10.5%	5.3%	5.7	1.3	9.5%	21
Quality of boat launches	0.0%	0.0%	5.3%	0.0%	57.9%	15.8%	5.3%	10.5%	5.3%	5.7	1.4	13.6%	22
Number of swim/sunbathing areas	0.0%	0.0%	0.0%	0.0%	75.0%	0.0%	0.0%	0.0%	25.0%	6.0	1.8	23.8%	21
Quality of swim/sunbathing areas	0.0%	0.0%	0.0%	0.0%	80.0%	0.0%	0.0%	0.0%	20.0%	5.8	1.7	31.8%	22
Number of hiking trails	0.0%	0.0%	0.0%	0.0%	66.7%	0.0%	13.3%	0.0%	20.0%	6.1	1.7	31.8%	22
Quality of hiking trails	0.0%	0.0%	0.0%	0.0%	66.7%	6.7%	6.7%	0.0%	20.0%	6.0	1.6	34.8%	23
Number of public docks	0.0%	0.0%	0.0%	0.0%	73.3%	6.7%	0.0%	6.7%	13.3%	5.8	1.5	31.8%	22
Quality of public docks	0.0%	0.0%	0.0%	0.0%	81.3%	0.0%	0.0%	6.3%	12.5%	5.7	1.5	30.4%	23
Number of campsites	0.0%	0.0%	0.0%	0.0%	70.6%	5.9%	0.0%	0.0%	23.5%	6.0	1.7	22.7%	22
Quality of campsites	0.0%	0.0%	0.0%	0.0%	73.3%	13.3%	0.0%	0.0%	13.3%	5.7	1.4	31.8%	22
Cost to use facilities	0.0%	0.0%	0.0%	0.0%	92.9%	0.0%	0.0%	0.0%	7.1%	5.3	1.1	33.3%	21
Quality of on-line campground reservation system	0.0%	0.0%	0.0%	0.0%	83.3%	0.0%	0.0%	0.0%	16.7%	5.7	1.6	45.5%	22

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.20 Wanapum Dam Overlook

	Too High			About Right				Too Low		Mean	SD	DK	N
Number of hiking trails	0.0%	0.0%	0.0%	0.0%	55.6%	0.0%	11.1%	11.1%	22.2%	6.4	1.8	35.7%	14
Quality of public docks	0.0%	0.0%	0.0%	0.0%	80.0%	0.0%	0.0%	0.0%	20.0%	5.8	1.8	58.3%	12
Quality of hiking trails	0.0%	0.0%	0.0%	0.0%	75.0%	0.0%	12.5%	0.0%	12.5%	5.8	1.5	42.9%	14
Number of public docks	0.0%	0.0%	0.0%	0.0%	83.3%	0.0%	0.0%	0.0%	16.7%	5.7	1.6	50.0%	12
Number of swim/sunbathing areas	0.0%	0.0%	0.0%	14.3%	57.1%	14.3%	0.0%	0.0%	14.3%	5.6	1.6	41.7%	12
Number of boat launches	0.0%	0.0%	0.0%	16.7%	66.7%	0.0%	0.0%	0.0%	16.7%	5.5	1.8	50.0%	12
Quality of boat launches	0.0%	0.0%	0.0%	16.7%	66.7%	0.0%	0.0%	0.0%	16.7%	5.5	1.8	50.0%	12
Quality of swim/sunbathing areas	0.0%	0.0%	16.7%	0.0%	66.7%	0.0%	0.0%	0.0%	16.7%	5.3	2.0	50.0%	12
Amount of shoreline available for use	0.0%	0.0%	10.0%	10.0%	70.0%	0.0%	0.0%	0.0%	10.0%	5.1	1.5	16.7%	12
Level of public recreation development	0.0%	0.0%	0.0%	9.1%	90.9%	0.0%	0.0%	0.0%	0.0%	4.9	0.3	21.4%	14
Number of campsites	0.0%	0.0%	14.3%	14.3%	57.1%	0.0%	14.3%	0.0%	0.0%	4.9	1.2	41.7%	12
Cost to use facilities	0.0%	0.0%	16.7%	0.0%	66.7%	16.7%	0.0%	0.0%	0.0%	4.8	1.0	50.0%	12
Number of restrooms/toilets	0.0%	8.3%	0.0%	0.0%	91.7%	0.0%	0.0%	0.0%	0.0%	4.8	0.9	7.7%	13
Number of picnic or day use areas	0.0%	0.0%	8.3%	8.3%	83.3%	0.0%	0.0%	0.0%	0.0%	4.8	0.6	7.7%	13
Quality of picnic or day use areas	0.0%	0.0%	7.7%	23.1%	61.5%	7.7%	0.0%	0.0%	0.0%	4.7	0.8	7.1%	14
Quality of campsites	0.0%	0.0%	16.7%	0.0%	83.3%	0.0%	0.0%	0.0%	0.0%	4.7	0.8	50.0%	12
Quality of on-line campground reservation system	0.0%	0.0%	16.7%	16.7%	66.7%	0.0%	0.0%	0.0%	0.0%	4.5	0.8	50.0%	12

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.21 Wanapum Dam Upper Boat Launch

	Too High				About Right			Too Low		Mean	SD	DK	N
Number of public docks	0.0%	0.0%	20.0%	0.0%	20.0%	0.0%	40.0%	0.0%	20.0%	6.2	2.3	0.0%	5
Quality of public docks	0.0%	0.0%	0.0%	0.0%	40.0%	0.0%	60.0%	0.0%	0.0%	6.2	1.1	0.0%	5
Number of boat launches	0.0%	0.0%	14.3%	0.0%	28.6%	14.3%	42.9%	0.0%	0.0%	5.7	1.5	0.0%	7
Quality of boat launches	0.0%	0.0%	0.0%	0.0%	66.7%	0.0%	33.3%	0.0%	0.0%	5.7	1.0	0.0%	6
Quality of campsites	0.0%	0.0%	0.0%	0.0%	66.7%	0.0%	33.3%	0.0%	0.0%	5.7	1.2	25.0%	4
Quality of swim/sunbathing areas	0.0%	0.0%	0.0%	0.0%	60.0%	20.0%	20.0%	0.0%	0.0%	5.6	0.9	16.7%	6
Number of swim/sunbathing areas	0.0%	0.0%	0.0%	0.0%	75.0%	0.0%	25.0%	0.0%	0.0%	5.5	1.0	20.0%	5
Number of campsites	0.0%	0.0%	0.0%	0.0%	75.0%	0.0%	25.0%	0.0%	0.0%	5.5	1.0	20.0%	5
Number of hiking trails	0.0%	0.0%	0.0%	0.0%	80.0%	0.0%	20.0%	0.0%	0.0%	5.4	0.9	0.0%	5
Quality of hiking trails	0.0%	0.0%	0.0%	0.0%	80.0%	0.0%	20.0%	0.0%	0.0%	5.4	0.9	0.0%	5
Number of picnic or day use areas	0.0%	0.0%	0.0%	16.7%	50.0%	16.7%	16.7%	0.0%	0.0%	5.3	1.0	0.0%	6
Quality of picnic or day use areas	0.0%	0.0%	0.0%	16.7%	50.0%	16.7%	16.7%	0.0%	0.0%	5.3	1.0	0.0%	6
Amount of shoreline available for use	0.0%	0.0%	0.0%	0.0%	66.7%	33.3%	0.0%	0.0%	0.0%	5.3	0.5	0.0%	6
Number of restrooms/toilets	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	0.0%	7
Quality of on-line campground reservation system	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	0.0%	3
Level of public recreation development	0.0%	0.0%	20.0%	0.0%	80.0%	0.0%	0.0%	0.0%	0.0%	4.6	0.9	0.0%	5
Quality of restrooms/toilets	0.0%	0.0%	14.3%	14.3%	71.4%	0.0%	0.0%	0.0%	0.0%	4.6	0.8	0.0%	7
Cost to use facilities	33.3%	0.0%	0.0%	0.0%	66.7%	0.0%	0.0%	0.0%	0.0%	3.7	2.3	25.0%	4

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.22 Wanapum Recreation Area (WSP)

	Too High			About Right				Too Low		Mean	SD	DK	N
Number of hiking trails	0.0%	0.0%	5.7%	2.9%	65.7%	5.7%	5.7%	5.7%	8.6%	5.5	1.5	34.0%	53
Amount of shoreline available for use	1.8%	0.0%	7.3%	7.3%	49.1%	7.3%	18.2%	3.6%	5.5%	5.5	1.6	1.8%	56
Number of campsites	2.4%	2.4%	0.0%	7.3%	63.4%	2.4%	9.8%	4.9%	7.3%	5.4	1.6	26.8%	56
Quality of hiking trails	0.0%	0.0%	5.7%	2.9%	77.1%	2.9%	2.9%	2.9%	5.7%	5.3	1.2	35.2%	54
Number of swim/sunbathing areas	0.0%	3.8%	5.7%	1.9%	62.3%	13.2%	9.4%	0.0%	3.8%	5.2	1.3	5.4%	56
Quality of swim/sunbathing areas	0.0%	2.0%	3.9%	7.8%	64.7%	9.8%	5.9%	2.0%	3.9%	5.2	1.2	5.6%	54
Number of public docks	0.0%	0.0%	6.5%	3.2%	74.2%	6.5%	3.2%	3.2%	3.2%	5.2	1.1	42.6%	54
Quality of restrooms/toilets	1.9%	0.0%	3.8%	9.6%	63.5%	9.6%	7.7%	0.0%	3.8%	5.2	1.3	7.1%	56
Number of restrooms/toilets	1.9%	0.0%	1.9%	1.9%	84.6%	1.9%	3.8%	0.0%	3.8%	5.1	1.1	5.5%	55
Number of boat launches	0.0%	0.0%	2.4%	4.9%	82.9%	2.4%	7.3%	0.0%	0.0%	5.1	0.7	25.5%	55
Level of public recreation development	2.0%	0.0%	2.0%	0.0%	88.0%	2.0%	4.0%	0.0%	2.0%	5.1	1.0	0.0%	50
Quality of public docks	0.0%	0.0%	9.4%	3.1%	75.0%	6.3%	6.3%	0.0%	0.0%	5.0	0.9	41.8%	55
Number of picnic or day use areas	1.9%	0.0%	11.3%	3.8%	73.6%	5.7%	0.0%	1.9%	1.9%	4.8	1.2	3.6%	55
Cost to use facilities	0.0%	3.8%	9.6%	9.6%	69.2%	0.0%	1.9%	1.9%	3.8%	4.8	1.3	7.1%	56
Quality of on-line campground reservation system	2.9%	2.9%	2.9%	11.8%	73.5%	2.9%	0.0%	0.0%	2.9%	4.8	1.2	35.8%	53
Quality of boat launches	0.0%	0.0%	9.5%	7.1%	81.0%	2.4%	0.0%	0.0%	0.0%	4.8	0.7	25.0%	56
Quality of campsites	2.3%	7.0%	2.3%	4.7%	74.4%	9.3%	0.0%	0.0%	0.0%	4.7	1.1	23.2%	56
Quality of picnic or day use areas	3.9%	5.9%	7.8%	7.8%	70.6%	2.0%	2.0%	0.0%	0.0%	4.5	1.2	1.9%	52

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Table B.10.23 Wanapum Turbine Park

	Too High				About Right			Too Low		Mean	SD	DK	N
Level of public recreation development	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	0.0%	7
Number of restrooms/toilets	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	0.0%	8
Quality of restrooms/toilets	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	0.0%	7
Number of picnic or day use areas	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	14.3%	7
Quality of picnic or day use areas	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	0.0%	7
Amount of shoreline available for use	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	16.7%	6
Number of boat launches	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	20.0%	5
Quality of boat launches	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	50.0%	6
Number of swim/sunbathing areas	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	50.0%	6
Quality of swim/sunbathing areas	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	50.0%	6
Number of hiking trails	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	50.0%	0.0%	0.0%	6.0	1.4	66.7%	6
Quality of hiking trails	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	66.7%	6
Number of public docks	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	66.7%	6
Quality of public docks	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	60.0%	5
Number of campsites	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	16.7%	6
Quality of campsites	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	33.3%	6
Cost to use facilities	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	33.3%	6
Quality of on-line campground reservation system	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0.0	50.0%	6

Note: Response Scale: 1= Too high, 5=About Right, 9= Too Low

Q11 Site-level responses to the question

“Please indicate the extent that the following issues were problems for you during your visit today”

Table B.11.1 Beverly Sand Dunes ORV Park

	No Problem					Big problem					Mean	SD	DK	N
Adequate protection from the wind	60.0%	20.0%	0.0%	0.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0	1.7	0.0%	5
Disruptive behavior by others	80.0%	0.0%	0.0%	0.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8	1.8	0.0%	5
Adequate safety and security	60.0%	20.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6	0.9	0.0%	5
Litter around the reservoir shoreline	80.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2	0.4	0.0%	5
Adequate information/warnings provided	80.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2	0.4	0.0%	5

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.2 Buckshot Recreation Area

	No Problem					Big problem					Mean	SD	DK	N
Litter around the reservoir shoreline	33.3%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	33.3%	4.0	4.4	0.0%	3
Adequate safety and security	33.3%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	33.3%	4.0	4.4	0.0%	3
Adequate protection from the wind	33.3%	33.3%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7	2.1	0.0%	3
Adequate information/warnings provided	33.3%	33.3%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7	2.1	0.0%	3
Disruptive behavior by others	33.3%	33.3%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7	2.1	0.0%	3
Other	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0	-	0.0%	1

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.3 Burkett Lake Recreation Area

	No Problem					Big problem					Mean	SD	DK	N
Litter around the reservoir shoreline	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	5.0	4.2	0.0%	2
Adequate safety and security	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	0.0	0.0%	2
Adequate protection from the wind	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	0.0	0.0%	2
Adequate information/warnings provided	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	0.0	0.0%	2
Disruptive behavior by others	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	0.0	0.0%	2

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.4 CBRA

	No Problem					Big problem					Mean	SD	DK	N
Adequate protection from the wind	45.8%	6.5%	8.5%	11.1%	15.0%	3.9%	3.3%	3.3%	2.6%	3.0	2.3	7.3%	165	
Litter around the reservoir shoreline	50.6%	13.3%	8.2%	2.5%	11.4%	5.7%	5.1%	2.5%	0.6%	2.6	2.2	5.4%	167	
Adequate information/warnings provided	55.8%	8.8%	6.8%	6.1%	13.6%	3.4%	1.4%	2.0%	2.0%	2.5	2.1	8.7%	161	
Disruptive behavior by others	58.2%	8.9%	7.0%	4.4%	12.0%	1.9%	3.2%	1.9%	2.5%	2.5	2.2	3.1%	163	
Adequate safety and security	59.1%	8.4%	6.5%	5.2%	9.1%	3.2%	3.9%	3.9%	0.6%	2.5	2.2	5.5%	163	
Other	16.7%	0.0%	0.0%	0.0%	25.0%	0.0%	16.7%	0.0%	41.7%	6.3	3.0	20.0%	15	
(please specify):	Camp reservation sticker info; No boat trailer parking left today at 2.30 pm; Speed limit surrounding camp areas not monitored; Porta-potty was full; no TP; Bathrooms; Would be nice to know when water is low; Behavior in the park on weekend load not family oriented; Pets off leash running around people, loud/music past 10pm, campfires during burn ban; Dogs off leash, no available garbage cans.													

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.5 Frenchman Coulee Recreation Area

	No Problem					Big problem					Mean	SD	DK	N
Adequate protection from the wind	50.0%	9.4%	3.1%	15.6%	6.3%	9.4%	3.1%	3.1%	0.0%	2.8	2.2	5.9%	34	
Adequate information/warnings provided	68.8%	9.4%	3.1%	3.1%	9.4%	0.0%	3.1%	0.0%	3.1%	2.1	2.0	5.9%	34	
Litter around the reservoir shoreline	55.9%	26.5%	5.9%	0.0%	5.9%	0.0%	2.9%	2.9%	0.0%	2.0	1.7	5.6%	36	
Disruptive behavior by others	81.3%	9.4%	3.1%	3.1%	0.0%	3.1%	0.0%	0.0%	0.0%	1.4	1.1	8.6%	35	
Adequate safety and security	78.8%	12.1%	3.0%	6.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4	0.8	5.7%	35	
Other	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	-	50.0%	2	

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.6 Huntzinger Road Boat Launch

	No Problem					Big problem					Mean	SD	DK	N
Litter around the reservoir shoreline	66.7%	22.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.1%	2.1	2.6	0.0%	9
Adequate protection from the wind	77.8%	0.0%	11.1%	0.0%	11.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7	1.4	0.0%	9
Adequate information/warnings provided	88.9%	0.0%	0.0%	0.0%	11.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4	1.3	0.0%	9
Adequate safety and security	88.9%	11.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1	0.3	0.0%	9
Disruptive behavior by others	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	0.0	0.0%	9

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.7 Jackson Creek Fish Camp

	No Problem					Big problem					Mean	SD	DK	N
Adequate protection from the wind	50.0%	0.0%	0.0%	0.0%	25.0%	25.0%	0.0%	0.0%	0.0%	0.0%	3.3	2.6	0.0%	4
Adequate information/warnings provided	50.0%	0.0%	0.0%	25.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8	2.1	0.0%	4
Disruptive behavior by others	66.7%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3	2.3	25.0%	4
Adequate safety and security	50.0%	25.0%	0.0%	0.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3	1.9	0.0%	4
Litter around the reservoir shoreline	80.0%	0.0%	0.0%	0.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8	1.8	0.0%	5
Other	66.7%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3	2.3	0.0%	3

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.8 PRRA

	No Problem					Big problem					Mean	SD	DK	N
Adequate protection from the wind	51.8%	5.4%	7.1%	8.9%	16.1%	0.0%	3.6%	3.6%	3.6%	3.6%	2.9	2.4	6.7%	60
Adequate information/warnings provided	83.6%	5.5%	5.5%	3.6%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	1.4	1.3	9.8%	61
Disruptive behavior by others	89.1%	1.8%	5.5%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	1.8%	1.3	1.3	9.8%	61
Litter around the reservoir shoreline	89.7%	5.2%	1.7%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	1.7%	1.3	1.2	4.9%	61
Adequate safety and security	91.4%	3.4%	3.4%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	1.2	0.8	4.9%	61
Other	0.0%	60.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	40.0%	4.8	3.6	0.0%	10
(please specify):	The beach; swimming area too close to marina; graffiti; washing hands in bathroom.													

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.9 Quilomene Dune & Bay

	No Problem					Big problem					Mean	SD	DK	N
Adequate protection from the wind	35.8%	6.3%	11.6%	9.5%	20.0%	5.3%	7.4%	1.1%	3.2%	3.4	2.3	7.8%	103	
Adequate information/warnings provided	44.2%	9.5%	9.5%	5.3%	10.5%	4.2%	9.5%	1.1%	6.3%	3.2	2.6	6.9%	102	
Litter around the reservoir shoreline	47.6%	11.7%	9.7%	5.8%	5.8%	4.9%	4.9%	2.9%	6.8%	3.0	2.6	1.0%	104	
Disruptive behavior by others	55.4%	11.9%	5.9%	6.9%	9.9%	2.0%	3.0%	2.0%	3.0%	2.5	2.2	1.9%	103	
Adequate safety and security	59.2%	11.2%	13.3%	7.1%	3.1%	1.0%	3.1%	1.0%	1.0%	2.1	1.8	6.7%	105	
Other	60.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	40.0%	4.2	4.4	44.4%	9	
(please specify):	Number of motels available & horrible restaurants, we brought our own this time; Too much warning signage; Music is loud; Concert goer's impact neighborhoods & resources; College kids with loud music & intoxication													

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.10 Rattlesnake Cove

	No Problem					Big problem					Mean	SD	DK	N
Disruptive behavior by others	90.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%	0.0%	1.7	2.2	9.1%	11	
Adequate protection from the wind	66.7%	11.1%	11.1%	11.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7	1.1	18.2%	11	
Adequate information/warnings provided	80.0%	0.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4	0.8	9.1%	11	
Adequate safety and security	90.0%	10.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1	0.3	9.1%	11	
Litter around the reservoir shoreline	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	0.0	9.1%	11	
Other	-	-	-	-	-	-	-	-	-	-	-	100.0%	1	
(please specify):	Too many people for a small community													

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.11 Riverstone Resort

	No Problem					Big problem					Mean	SD	DK	N
Adequate protection from the wind	44.4%	11.1%	22.2%	11.1%	0.0%	0.0%	0.0%	0.0%	11.1%	2.8	2.6	10.0%	10	
Adequate information/warnings provided	87.5%	0.0%	0.0%	0.0%	0.0%	12.5%	0.0%	0.0%	0.0%	1.6	1.8	20.0%	10	
Litter around the reservoir shoreline	88.9%	0.0%	11.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2	0.7	10.0%	10	
Adequate safety and security	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	0.0	10.0%	10	
Disruptive behavior by others	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	0.0	20.0%	10	
Other	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	-	50.0%	2	
(please specify):	Love the new improvements, a great day trip location from the Puget Sound Area.													

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.12 Rocky Coulee

	No Problem					Big problem					Mean	SD	DK	N
Adequate protection from the wind	67.7%	6.5%	0.0%	3.2%	6.5%	6.5%	6.5%	3.2%	0.0%	2.4	2.3	11.4%	35	
Adequate information/warnings provided	72.7%	15.2%	3.0%	0.0%	3.0%	3.0%	3.0%	0.0%	0.0%	1.7	1.5	5.7%	35	
Adequate safety and security	90.3%	6.5%	0.0%	0.0%	0.0%	0.0%	3.2%	0.0%	0.0%	1.3	1.1	11.4%	35	
Litter around the reservoir shoreline	90.9%	3.0%	6.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2	0.5	5.7%	35	
Disruptive behavior by others	96.3%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	0.2	20.6%	34	
Other	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0	-	50.0%	2	
(please specify):	Direct sun.													

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.13 Sand Hollow

	No Problem					Big problem					Mean	SD	DK	N
Litter around the reservoir shoreline	66.7%	12.1%	6.1%	3.0%	3.0%	6.1%	3.0%	0.0%	0.0%	1.9	1.7	0.0%	33	
Adequate safety and security	66.7%	6.7%	13.3%	0.0%	0.0%	3.3%	3.3%	0.0%	6.7%	2.2	2.4	3.2%	31	
Adequate protection from the wind	51.7%	3.4%	10.3%	0.0%	3.4%	0.0%	6.9%	6.9%	17.2%	3.7	3.4	0.0%	29	
Adequate information/warnings provided	57.1%	10.7%	10.7%	3.6%	7.1%	7.1%	0.0%	0.0%	3.6%	2.4	2.1	6.7%	30	
Disruptive behavior by others	80.0%	0.0%	10.0%	0.0%	3.3%	0.0%	3.3%	0.0%	3.3%	1.8	1.9	3.2%	31	
Other	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	75.0%	7.0	4.0	0.0%	4	
(please specify):	PUD harassed us; Leave us alone, we self-police; Development; Disruptive behavior of PUD employees.													

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.14 Sunland Boat Launch

	No Problem					Big problem					Mean	SD	DK	N
Adequate protection from the wind	73.7%	0.0%	0.0%	0.0%	15.8%	0.0%	10.5%	0.0%	0.0%	2.3	2.2	0.0%	19	
Disruptive behavior by others	66.7%	4.8%	9.5%	4.8%	4.8%	0.0%	4.8%	0.0%	4.8%	2.2	2.3	0.0%	21	
Litter around the reservoir shoreline	73.7%	10.5%	0.0%	5.3%	5.3%	0.0%	0.0%	0.0%	5.3%	1.9	2.1	0.0%	19	
Adequate safety and security	81.0%	4.8%	0.0%	4.8%	4.8%	0.0%	0.0%	0.0%	4.8%	1.8	2.0	0.0%	21	
Adequate information/warnings provided	78.9%	5.3%	0.0%	5.3%	10.5%	0.0%	0.0%	0.0%	0.0%	1.6	1.4	0.0%	19	
Other	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	-	0.0%	1	
(please specify):	Noisy music; Concerts													

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.15 Sunland Picnic Area

	No Problem					Big problem					Mean	SD	DK	N
Adequate information/warnings provided	71.4%	0.0%	0.0%	0.0%	28.6%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1	2.0	12.5%	8
Disruptive behavior by others	75.0%	0.0%	0.0%	0.0%	12.5%	12.5%	0.0%	0.0%	0.0%	0.0%	2.1	2.1	0.0%	8
Litter around the reservoir shoreline	62.5%	12.5%	12.5%	0.0%	12.5%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9	1.5	0.0%	8
Adequate protection from the wind	62.5%	12.5%	12.5%	0.0%	12.5%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9	1.5	0.0%	8
Adequate safety and security	75.0%	12.5%	0.0%	0.0%	12.5%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6	1.4	0.0%	8
Other	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	-	0.0%	1

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.16 The Cove

	No Problem					Big problem					Mean	SD	DK	N
Adequate protection from the wind	50.0%	0.0%	16.7%	16.7%	0.0%	0.0%	16.7%	0.0%	0.0%	0.0%	2.8	2.4	0.0%	6
Litter around the reservoir shoreline	83.3%	0.0%	16.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3	0.8	0.0%	6
Adequate safety and security	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	0.0	0.0%	6
Adequate information/warnings provided	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	0.0	0.0%	6
Disruptive behavior by others	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	0.0	16.7%	6
Other	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5	0.7	0.0%	2
(please specify):	No boat launch													

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.17 Vantage Boat Launch

	No Problem					Big problem					Mean	SD	DK	N
Adequate protection from the wind	54.8%	4.8%	4.8%	9.7%	11.3%	4.8%	4.8%	1.6%	3.2%	0.0%	2.8	2.4	7.5%	67
Litter around the reservoir shoreline	80.3%	6.1%	0.0%	4.5%	1.5%	7.6%	0.0%	0.0%	0.0%	0.0%	1.6	1.5	5.7%	70
Adequate information/warnings provided	80.3%	6.6%	6.6%	1.6%	3.3%	0.0%	1.6%	0.0%	0.0%	0.0%	1.5	1.2	10.3%	68
Disruptive behavior by others	85.5%	8.1%	1.6%	0.0%	3.2%	0.0%	1.6%	0.0%	0.0%	0.0%	1.3	1.1	7.5%	67
Adequate safety and security	85.5%	9.7%	0.0%	1.6%	3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3	0.8	7.5%	67
Other	80.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2	0.4	16.7%	12

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.18 Wanapum Dam Lower Boat Launch

	No Problem					Big problem					Mean	SD	DK	N
Adequate protection from the wind	45.0%	5.0%	5.0%	0.0%	25.0%	20.0%	0.0%	0.0%	0.0%	0.0%	3.2	2.2	4.8%	21
Adequate information/warnings provided	65.0%	5.0%	10.0%	5.0%	10.0%	5.0%	0.0%	0.0%	0.0%	0.0%	2.1	1.7	4.8%	21
Litter around the reservoir shoreline	70.0%	10.0%	5.0%	5.0%	5.0%	5.0%	0.0%	0.0%	0.0%	0.0%	1.8	1.5	4.8%	21
Disruptive behavior by others	81.0%	4.8%	0.0%	4.8%	4.8%	0.0%	0.0%	0.0%	4.8%	0.0%	1.8	2.0	0.0%	21
Adequate safety and security	71.4%	9.5%	4.8%	4.8%	9.5%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7	1.3	0.0%	21
Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	9.0	0.0	0.0%	2
(please specify):	Please provide more education on life jackets. With the Dam creating all the currents I don't believe how few life jackets I saw. Sad!													

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.19 Wanapum Dam Overlook

	No Problem					Big problem					Mean	SD	DK	N
Disruptive behavior by others	71.4%	14.3%	0.0%	0.0%	7.1%	0.0%	0.0%	0.0%	0.0%	7.1%	2.0	2.3	12.5%	16
Adequate protection from the wind	78.6%	7.1%	7.1%	0.0%	0.0%	0.0%	0.0%	0.0%	7.1%	0.0%	1.7	1.9	12.5%	16
Adequate information/warnings provided	76.9%	15.4%	0.0%	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5	1.1	18.8%	16
Litter around the reservoir shoreline	66.7%	25.0%	8.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4	0.7	20.0%	15
Adequate safety and security	76.9%	15.4%	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4	0.9	18.8%	16

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.20 Wanapum Dam Upper Boat Launch

	No Problem					Big problem					Mean	SD	DK	N
Adequate protection from the wind	50.0%	16.7%	0.0%	16.7%	0.0%	0.0%	16.7%	0.0%	0.0%	0.0%	2.7	2.4	0.0%	6
Adequate information/warnings provided	83.3%	16.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2	0.4	0.0%	6
Litter around the reservoir shoreline	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	0.0	0.0%	6
Adequate safety and security	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	0.0	0.0%	6
Disruptive behavior by others	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	0.0	0.0%	6
Other	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0	-	0.0%	1

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.21 Wanapum Recreation Area (WSP)

	No Problem					Big problem					Mean	SD	DK	N
Adequate protection from the wind	58.8%	5.9%	9.8%	2.0%	13.7%	2.0%	2.0%	0.0%	5.9%	2.5	2.3	7.3%	55	
Disruptive behavior by others	71.2%	5.8%	1.9%	1.9%	5.8%	1.9%	5.8%	3.8%	1.9%	2.3	2.3	5.5%	55	
Litter around the reservoir shoreline	79.2%	5.7%	1.9%	0.0%	1.9%	3.8%	7.5%	0.0%	0.0%	1.8	1.9	3.6%	55	
Adequate information/warnings provided	75.5%	7.5%	5.7%	1.9%	3.8%	0.0%	5.7%	0.0%	0.0%	1.7	1.6	3.6%	55	
Adequate safety and security	83.0%	7.5%	1.9%	0.0%	0.0%	5.7%	0.0%	0.0%	1.9%	1.5	1.6	3.6%	55	
Other (please specify):	-	-	-	-	-	-	-	-	-	-	-	100.0%	2	
	Glass in water													

Note: Response Scale: 1= No Problem, 9= Big Problem

Table B.11.22 Wanapum Turbine Park

	No Problem					Big problem					Mean	SD	DK	N
Adequate protection from the wind	71.4%	14.3%	0.0%	0.0%	0.0%	14.3%	0.0%	0.0%	0.0%	1.9	1.9	12.5%	8	
Adequate safety and security	71.4%	14.3%	0.0%	14.3%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6	1.1	12.5%	8	
Litter around the reservoir shoreline	66.7%	16.7%	16.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5	0.8	25.0%	8	
Adequate information/warnings provided	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	0.0	12.5%	8	
Disruptive behavior by others	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	0.0	12.5%	8	

Note: Response Scale: 1= No Problem, 9= Big Problem

Q12 Site-level responses to the question

“Help us understand crowding issues by answering the following questions. (*mark one response for each item*)”

Table B.12.1 Beverly Sand Dunes ORV Park

	Not at all crowded						Extremely crowded			Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	-	0.0%	5
How crowded did you <u>expect</u> to feel today?	20.0%	20.0%	20.0%	0.0%	0.0%	20.0%	0.0%	0.0%	20.0%	4.2	3.3	0.0%	5

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.2 Buckshot Recreation Area

	Not at all crowded						Extremely crowded			Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	33.3%	66.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7	0.6	0.0%	3
How crowded did you <u>expect</u> to feel today?	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	33.3%	33.3%	6.3	3.8	0.0%	3

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.3 Burkett Lake Recreation Area

	Not at all crowded						Extremely crowded			Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	-	0.0%	3
How crowded did you <u>expect</u> to feel today?	66.7%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3	0.6	0.0%	3

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.4 CBRA

	Not at all crowded						Extremely crowded			Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	45.1%	15.6%	8.7%	9.2%	2.9%	11.6%	2.9%	2.3%	1.7%	2.8	2.2	0.0%	173
How crowded did you <u>expect</u> to feel today?	20.4%	12.0%	4.2%	19.2%	9.0%	20.4%	4.2%	6.0%	4.8%	4.2	2.4	2.3%	171

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.5 Frenchman Coulee Recreation Area

	Not at all crowded						Extremely crowded			Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	65.7%	22.9%	5.7%	2.9%	0.0%	2.9%	0.0%	0.0%	0.0%	1.6	1.1	0.0%	35
How crowded did you <u>expect</u> to feel today?	35.3%	17.6%	11.8%	17.6%	8.8%	8.8%	0.0%	0.0%	0.0%	2.7	1.7	2.9%	35

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.6 Huntzinger Road Boat Launch

	Not at all crowded						Extremely crowded			Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	88.9%	11.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1	0.3	0.0%	9
How crowded did you <u>expect</u> to feel today?	12.5%	0.0%	12.5%	12.5%	25.0%	12.5%	12.5%	12.5%	0.0%	4.9	2.2	0.0%	8

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.7 Jackson Creek Fish Camp

	Not at all crowded						Extremely crowded			Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	-	0.0%	5
How crowded did you <u>expect</u> to feel today?	80.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	0.0%	2.4	3.1	0.0%	5

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.8 PRRA

	Not at all crowded						Extremely crowded			Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	76.7%	11.7%	5.0%	5.0%	0.0%	1.7%	0.0%	0.0%	0.0%	1.5	1.0	0.0%	60
How crowded did you <u>expect</u> to feel today?	39.7%	12.1%	13.8%	19.0%	3.4%	6.9%	3.4%	1.7%	0.0%	2.8	1.9	1.7%	59

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.9 Quilomene Dune & Bay

	Not at all crowded						Extremely crowded			Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	37.0%	18.5%	9.3%	16.7%	1.9%	10.2%	2.8%	1.9%	1.9%	2.9	2.1	0.0%	108
How crowded did you <u>expect</u> to feel today?	20.6%	7.5%	7.5%	13.1%	6.5%	22.4%	5.6%	8.4%	8.4%	4.6	2.6	0.9%	108

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.10 Rattlesnake Cove

	Not at all crowded						Extremely crowded			Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	63.6%	18.2%	18.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5	0.8	0.0%	11
How crowded did you <u>expect</u> to feel today?	18.2%	9.1%	9.1%	18.2%	9.1%	36.4%	0.0%	0.0%	0.0%	4.0	2.0	0.0%	11

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.11 Riverstone Resort

	Not at all crowded						Extremely crowded			Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	81.8%	9.1%	9.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3	0.6	0.0%	11
How crowded did you <u>expect</u> to feel today?	12.5%	12.5%	12.5%	0.0%	12.5%	25.0%	25.0%	0.0%	0.0%	4.6	2.3	20.0%	10

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.12 Rocky Coulee

	Not at all crowded					Extremely crowded					Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	63.6%	15.2%	18.2%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	1.7	1.1	2.9%	34	
How crowded did you <u>expect</u> to feel today?	30.0%	23.3%	13.3%	23.3%	0.0%	3.3%	6.7%	0.0%	0.0%	2.8	1.8	3.2%	31	

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.13 Sand Hollow

	Not at all crowded					Extremely crowded					Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	81.8%	9.1%	3.0%	0.0%	0.0%	6.1%	0.0%	0.0%	0.0%	1.5	1.3	0.0%	33	
How crowded did you <u>expect</u> to feel today?	43.3%	10.0%	3.3%	6.7%	3.3%	13.3%	13.3%	3.3%	3.3%	3.5	2.7	3.2%	31	

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.14 Sunland Boat Launch

	Not at all crowded					Extremely crowded					Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	57.1%	28.6%	4.8%	4.8%	4.8%	0.0%	0.0%	0.0%	0.0%	1.7	1.1	8.7%	23	
How crowded did you <u>expect</u> to feel today?	35.0%	10.0%	15.0%	20.0%	5.0%	15.0%	0.0%	0.0%	0.0%	3.0	1.8	9.1%	22	

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.15 Sunland Picnic Area

	Not at all crowded					Extremely crowded					Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	62.5%	12.5%	0.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9	1.4	0.0%	8	
How crowded did you <u>expect</u> to feel today?	25.0%	12.5%	25.0%	25.0%	0.0%	12.5%	0.0%	0.0%	0.0%	3.0	1.7	0.0%	8	

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.16 The Cove

	Not at all crowded						Extremely crowded			Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	-	0.0%	6
How crowded did you <u>expect</u> to feel today?	50.0%	16.7%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	2.2	1.5	0.0%	6

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.17 Vantage Boat Launch

	Not at all crowded						Extremely crowded			Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	72.5%	14.5%	4.3%	7.2%	0.0%	1.4%	0.0%	0.0%	0.0%	1.5	1.0	2.8%	71
How crowded did you <u>expect</u> to feel today?	35.9%	12.5%	4.7%	12.5%	9.4%	20.3%	1.6%	3.1%	0.0%	3.3	2.2	5.9%	68

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.18 Wanapum Dam Lower Boat Launch

	Not at all crowded						Extremely crowded			Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	60.0%	15.0%	10.0%	10.0%	0.0%	5.0%	0.0%	0.0%	0.0%	1.9	1.4	4.8%	21
How crowded did you <u>expect</u> to feel today?	20.0%	10.0%	15.0%	30.0%	0.0%	15.0%	5.0%	5.0%	0.0%	3.7	2.1	0.0%	20

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.19 Wanapum Dam Overlook

	Not at all crowded						Extremely crowded			Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	68.8%	12.5%	0.0%	6.3%	0.0%	12.5%	0.0%	0.0%	0.0%	1.9	1.8	5.9%	17
How crowded did you <u>expect</u> to feel today?	58.8%	0.0%	11.8%	11.8%	0.0%	5.9%	5.9%	5.9%	0.0%	2.6	2.4	0.0%	17

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.20 Wanapum Dam Upper Boat Launch

	Not at all crowded						Extremely crowded			Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	66.7%	16.7%	0.0%	0.0%	0.0%	16.7%	0.0%	0.0%	0.0%	2.0	2.0	0.0%	6
How crowded did you <u>expect</u> to feel today?	50.0%	33.3%	0.0%	16.7%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8	1.2	0.0%	6

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.21 Wanapum Recreation Area (WSP)

	Not at all crowded						Extremely crowded			Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	47.3%	9.1%	1.8%	23.6%	7.3%	3.6%	7.3%	0.0%	0.0%	2.7	2.0	0.0%	55
How crowded did you <u>expect</u> to feel today?	24.1%	7.4%	14.8%	33.3%	5.6%	13.0%	1.9%	0.0%	0.0%	3.4	1.7	1.8%	55

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Table B.12.22 Wanapum Turbine Park

	Not at all crowded						Extremely crowded			Mean	SD	DK/NA	N
How <i>crowded</i> did you feel today?	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0	-	12.5%	8
How crowded did you <u>expect</u> to feel today?	57.1%	0.0%	14.3%	14.3%	0.0%	14.3%	0.0%	0.0%	0.0%	2.4	2.0	12.5%	8

Note: Response Scale: 1= Not at all Crowded, 9= Extremely Crowded

Q13.a Site-level responses to the question

“If you used the area shown in **Photo A**, what is the maximum number of people you think could use the recreation site pictured at any one time without you feeling too crowded? “

Table B.13.a Maximum number of people that could use the recreation site

Site	Number of people						Min	Max	Mean	SD	N
	≤ 20	21-40	41-60	61-80	81-100	>100					
Beverly Sand Dunes ORV Park	40%	20%	0%	0%	40%	0%	6	100	51.2	45.4	5
Buckshot Recreation Area	50%	0%	0%	0%	0%	50%	6	1000	503.0	702.9	2
Burkett Lake Recreation Area	100%	0%	0%	0%	0%	0%	3	8	5.7	2.5	3
CBRA	29%	12%	7%	7%	15%	30%	1	1000	128.2	186.7	136
Frenchman Coulee Recreation Area	52%	26%	13%	0%	0%	10%	5	500	51.4	95.2	31
Huntzinger Road Boat Launch	33%	17%	33%	0%	17%	0%	15	100	44.2	31.8	6
Huntzinger Road Fishing Access Site	100%	0%	0%	0%	0%	0%	2	8	5.3	3.1	3
Jackson Creek Fish Camp	100%	0%	0%	0%	0%	0%	4	20	14.7	9.2	3
PRRA	54%	10%	17%	4%	8%	6%	1	300	41.3	56.5	48
Quilomene Dune & Bay	2%	1%	7%	1%	16%	73%	3	8000	637.0	1115.6	91
Rattlesnake Cove	56%	22%	11%	0%	0%	11%	5	300	55.2	92.8	9
Riverstone Resort	10%	10%	30%	0%	0%	50%	20	500	170.2	183.9	10
Rocky Coulee	41%	24%	24%	7%	3%	0%	1	100	35.4	23.5	29
Sand Hollow	43%	23%	3%	3%	17%	10%	4	400	59.8	81.7	30
Sunland Boat Launch	21%	32%	32%	5%	11%	0%	4	100	43.6	26.5	19
Sunland Picnic Area	14%	0%	29%	14%	14%	29%	13	200	98.3	74.4	7
The Cove	17%	33%	17%	0%	17%	17%	20	200	75.8	66.8	6
Vantage Boat Launch	14%	10%	24%	17%	22%	12%	2	300	73.4	53.6	58
Wanapum Dam Lower Boat Launch	31%	15%	46%	8%	0%	0%	3	70	37.5	22.0	13
Wanapum Dam Overlook	67%	25%	0%	0%	0%	8%	6	260	37.3	70.8	12
Wanapum Dam Upper Boat Launch	100%	0%	0%	0%	0%	0%	1	20	11.0	9.5	3
Wanapum Recreation Area (WSP)	12%	13%	17%	12%	17%	29%	3	800	116.3	134.8	52
Wanapum Turbine Park	14%	29%	57%	0%	0%	0%	20	50	41.4	12.1	7

Q13.b Site-level responses to the question

“What is the maximum number of people that you saw actually using the recreation site pictured at any one time during your visit today?”

Table B.13.b Maximum number of people that you saw actually using the recreation site

Site	Number of people							DK	Min	Max	Mean	SD	N
	0	1≤ 20	21-40	41-60	61-80	81-100	>100						
Beverly Sand Dunes ORV Park	33%	67%	0%	0%	0%	0%	0%	-	0	10	4.3	5.1	3
Buckshot Recreation Area	0%	100%	0%	0%	0%	0%	0%		3	3	3.0		1
Burkett Lake Recreation Area	33%	67%	0%	0%	0%	0%	0%	-	0	4	2.3	2.1	3
CBRA	1%	39%	16%	10%	4%	11%	18%	17.9%	0	1500	82.4	155.4	125
Frenchman Coulee Recreation Area	6%	94%	0%	0%	0%	0%	0%	8.6%	0	20	6.2	4.5	31
Huntzinger Road Boat Launch	20%	80%	0%	0%	0%	0%	0%	-	0	8	4.60	3.0	5
Huntzinger Road Fishing Access Site	50%	50%	0%	0%	0%	0%	0%	-	0	4	2.00	2.8	2
Jackson Creek Fish Camp	0%	100%	0%	0%	0%	0%	0%	40.0%	1	1	1.0	0.0	2
PRRA	8%	75%	15%	2%	0%	0%	0%	7.1%	0	50	11.4	12.1	48
Quilomene Dune & Bay	0%	8%	8%	14%	7%	17%	45%	13.5%	10	3000	266.9	433.5	86
Rattlesnake Cove	0%	78%	11%	11%	0%	0%	0%	12.5%	4	60	16.2	18.3	9
Riverstone Resort	0%	89%	0%	11%	0%	0%	0%	9.1%	3	50	15.4	14.5	9
Rocky Coulee	19%	81%	0%	0%	0%	0%	0%	11.1%	0	15	4.8	4.3	27
Sand Hollow	7%	70%	10%	10%	0%	0%	3%	6.3%	0	500	31.5	89.6	30
Sunland Boat Launch	0%	90%	5%	0%	5%	0%	0%	13.3%	2	75	13.3	16.1	20
Sunland Picnic Area	13%	63%	13%	13%	0%	0%	0%	-	0	50	18.9	17.7	8
The Cove	0%	100%	0%	0%	0%	0%	0%	-	1	2	1.5	0.5	6
Vantage Boat Launch	2%	82%	5%	7%	2%	0%	2%	7.8%	0	200	18.0	28.7	57
Wanapum Dam Lower Boat Launch	0%	92%	8%	0%	0%	0%	0%	7.7%	2	30	8.2	7.9	12
Wanapum Dam Overlook	10%	90%	0%	0%	0%	0%	0%	12.5%	0	13	5.4	4.8	10
Wanapum Dam Upper Boat Launch	33%	67%	0%	0%	0%	0%	0%	25.0%	0	8	4.0	4.0	3
Wanapum Recreation Area (WSP)	2%	47%	16%	9%	2%	7%	18%	18.2%	0	250	52.73	61.1	45
Wanapum Turbine Park	57%	43%	0%	0%	0%	0%	0%		0	8	1.86	3.0	7

Q14 Site-level responses to the question

“Please estimate how much money you and your party will spend TODAY while on this trip (e.g., fuel, lodging, restaurants, groceries, admissions, fees, outdoor gear, etc.).”

Table B.14 Current day trip Expenditure

Site	Current day Trip Expenditure (\$)								Mean	Median	SD	N
	0	1-50	51-100	101-150	151-200	201-300	301-500	>500				
Beverly Sand Dunes ORV Park	0.0%	0.0%	40.0%	20.0%	0.0%	40.0%	0.0%	0.0%	180.0	150.0	90.8	5
Buckshot Recreation Area	0.0%	66.7%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	48.3	50.0	27.5	3
Burkett Lake Recreation Area	33.3%	66.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.7	12.0	10.1	3
CBRA	2.5%	21.0%	18.5%	10.5%	10.5%	11.1%	11.7%	21.6%	330.0	150.0	518.4	162
Frenchman Coulee Recreation Area	8.8%	58.8%	11.8%	2.9%	2.9%	5.9%	5.9%	5.9%	140.0	45.0	348.7	34
Huntzinger Road Boat Launch	0.0%	66.7%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	52.5	50.0	31.3	6
Huntzinger Road Fishing Access Site	0.0%	66.7%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	45.0	40.0	18.0	3
Jackson Creek Fish Camp	0.0%	20.0%	40.0%	0.0%	0.0%	40.0%	0.0%	0.0%	160.0	100.0	108.4	5
PRRA	14.5%	20.0%	27.3%	3.6%	16.4%	5.5%	12.7%	3.6%	143.6	100.0	141.2	55
Quilomene Dune & Bay	0.9%	10.3%	24.3%	7.5%	14.0%	8.4%	18.7%	31.8%	774.7	200.0	3,974.5	107
Rattlesnake Cove	0.0%	50.0%	10.0%	20.0%	20.0%	0.0%	0.0%	0.0%	91.5	75.0	73.8	10
Riverstone Resort	0.0%	50.0%	10.0%	0.0%	20.0%	20.0%	0.0%	0.0%	123.0	75.0	104.5	10
Rocky Coulee	16.1%	54.8%	19.4%	6.5%	0.0%	0.0%	3.2%	3.2%	61.2	40.0	91.7	31
Sand Hollow	10.0%	36.7%	23.3%	0.0%	6.7%	13.3%	6.7%	6.7%	181.9	85.0	367.0	30
Sunland Boat Launch	9.1%	40.9%	22.7%	4.5%	4.5%	13.6%	4.5%	0.0%	104.6	55.0	109.6	22
Sunland Picnic Area	14.3%	42.9%	14.3%	0.0%	0.0%	14.3%	14.3%	14.3%	140.0	50.0	189.6	7
The Cove	0.0%	66.7%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	57.5	50.0	35.2	6
Vantage Boat Launch	6.2%	27.7%	26.2%	7.7%	15.4%	7.7%	3.1%	7.7%	187.6	100.0	320.7	65
Wanapum Dam Lower Boat Launch	5.9%	11.8%	41.2%	0.0%	23.5%	11.8%	5.9%	0.0%	146.5	100.0	100.9	17
Wanapum Dam Overlook	7.1%	28.6%	28.6%	0.0%	28.6%	0.0%	0.0%	7.1%	158.2	77.5	253.8	14
Wanapum Dam Upper Boat Launch	0.0%	50.0%	25.0%	25.0%	0.0%	0.0%	0.0%	0.0%	75.0	62.5	61.2	4
Wanapum Recreation Area (WSP)	1.9%	17.3%	25.0%	17.3%	11.5%	13.5%	11.5%	11.5%	182.4	150.0	150.6	52

Q16 Site-level responses to the question

If you were on the water today, “what areas of the Priest Rapids/Wanapum reservoirs did you use today? (Mark all areas used)”

Table B.16 Percent response on used areas of the Priest Rapids/Wanapum Reservoirs

Site	% response on used areas of the Priest Rapids/Wanapum Reservoirs							N
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit F	Unit G	
Buckshot Recreation Area						100.0%		1
CBRA	41.9%	87.1%	51.6%	3.2%				31
Frenchman Coulee Recreation Area			50.0%	100.0%				2
Huntzinger Road Boat Launch						100.0%		1
Huntzinger Road Fishing Access Site	50.0%	50.0%	50.0%	50.0%	100.0%	50.0%		2
PRRA	5.9%	5.9%	5.9%	5.9%	5.9%	17.6%	94.1%	17
Quilomene Dune & Bay	14.6%	53.9%	84.3%	20.2%	6.7%	2.2%	3.4%	89
Rattlesnake Cove				100.0%	100.0%			1
Rocky Coulee				100.0%				2
Sand Hollow					100.0%	100.0%		1
Sunland Boat Launch			92.9%	35.7%	7.1%			14
Vantage Boat Launch		22.2%	55.6%	66.7%	55.6%			18
Wanapum Dam Lower Boat Launch						100.0%		2
Wanapum Dam Overlook	100.0%			100.0%				1
Wanapum Dam Upper Boat Launch					100.0%			1
Wanapum Recreation Area (WSP)	-	5.9%	5.9%	11.8%	94.1%	-	-	17

Q17.a Site-level responses to the question

“Did you have to wait to use a boat launch today?”

Table B.17.a Response on having to wait to use boat launch

Site	Yes	No	N
Beverly Sand Dunes ORV Park	-	100.0%	1
CBRA	22.5%	77.5%	40
Frenchman Coulee Recreation Area	-	100.0%	4
Huntzinger Road Boat Launch	-	100.0%	1
Huntzinger Road Fishing Access Site	-	100.0%	2
Jackson Creek Fish Camp	-	100.0%	2
PRRA	4.0%	96.0%	25
Quilomene Dune & Bay	20.9%	79.1%	91
Riverstone Resort	-	100.0%	1
Rocky Coulee	-	100.0%	3
Sand Hollow	-	100.0%	6
Sunland Boat Launch	28.6%	71.4%	14
Vantage Boat Launch	15.4%	84.6%	26
Wanapum Dam Lower Boat Launch	16.7%	83.3%	6
Wanapum Dam Overlook	-	100.0%	1
Wanapum Dam Upper Boat Launch	-	100.0%	4
Wanapum Recreation Area (WSP)	5.0%	95.0%	20

Q.17.aa Site-level responses to the question

“How long did you wait to use a boat launch today?”

Table B.17.aa Current conditions on waiting times to use boat launch

Site	Wait Time (in minutes)						Mean	SD	Min	Max	N
	1	5	10	15	16	20					
CBRA	10.0%	40.0%	50.0%	0.0%	0.0%	0.0%	7.1	3.3	1	10	10
Huntzinger Road Boat Launch	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	15.0	-	15	15	1
PRRA	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	10.0	-	10	10	1
Quilomene Dune & Bay	0.0%	26.3%	52.6%	0.0%	5.3%	15.8%	10.6	5.0	5	20	19
Sunland Boat Launch	0.0%	25.0%	75.0%	0.0%	0.0%	0.0%	8.8	2.5	5	10	4
Vantage Boat Launch	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.0	0	5	5	3
Wanapum Recreation Area (WSP)	0.0%	50.0%	0.0%	50.0%	0.0%	0.0%	10.0	7.1	5	15	2

Q17.b Site-level responses to the question

“How long of a wait to launch your boat is acceptable to you?”

Table B.17.b Acceptability of waiting times to use boat launch (in minutes)

Site	Acceptable waiting times (in minutes)							Mean	SD	Min	Max	N
	0	1-5	6-10	11-15	16-20	21-25	>25					
CBRA	14.3%	22.9%	45.7%	14.3%	2.9%	0.0%	0.0%	8.31	5.092	0	20	35
Huntzinger Road Boat Launch		0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	45.00		45	45	1
Huntzinger Road Fishing Access Site	50.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	7.50	10.607	0	15	2
PRRA	20.0%	40.0%	13.3%	26.7%	0.0%	0.0%	0.0%	7.13	5.768	0	15	15
Quilomene Dune & Bay	10.5%	13.2%	31.6%	27.6%	7.9%	1.3%	7.9%	14.16	16.810	0	120	76
Rocky Coulee	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00	0.000	0	0	2
Sand Hollow		0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	30.00	0.000	30	30	2
Sunland Boat Launch	10.0%	40.0%	50.0%	0.0%	0.0%	0.0%	0.0%	7.00	3.496	0	10	10
Vantage Boat Launch	15.0%	30.0%	30.0%	15.0%	10.0%	0.0%	0.0%	8.75	6.043	0	20	20
Wanapum Dam Lower Boat Launch		40.0%	20.0%	20.0%	0.0%	0.0%	20.0%	13.00	10.368	5	30	5
Wanapum Dam Overlook	50.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	9.00	12.728	0	18	2
Wanapum Dam Upper Boat Launch		33.3%	33.3%	33.3%	0.0%	0.0%	0.0%	10.00	5.000	5	15	3
Wanapum Recreation Area (WSP)	7.1%	28.6%	28.6%	21.4%	14.3%	0.0%	0.0%	10.07	6.220	0	20	14

Q18.a.1 Site-level responses to the question

Please rate each photo by indicating how acceptable you think “how many boats could use the segments of the reservoirs that you used today without you feeling too crowded and unsafe”. A rating of -4 means the number of boats is “very unacceptable”, and a rating of +4 means the number of boats is “very acceptable”.

Table B.18.a.1 CBRA

	N	Mean	SD
Photo 1	31	3.4	1.6
Photo 2	30	3.7	0.8
Photo 3	30	3.6	0.9
Photo 4	30	3.1	1.5
Photo 5	31	2.4	1.9
Photo 6	31	1.6	2.5

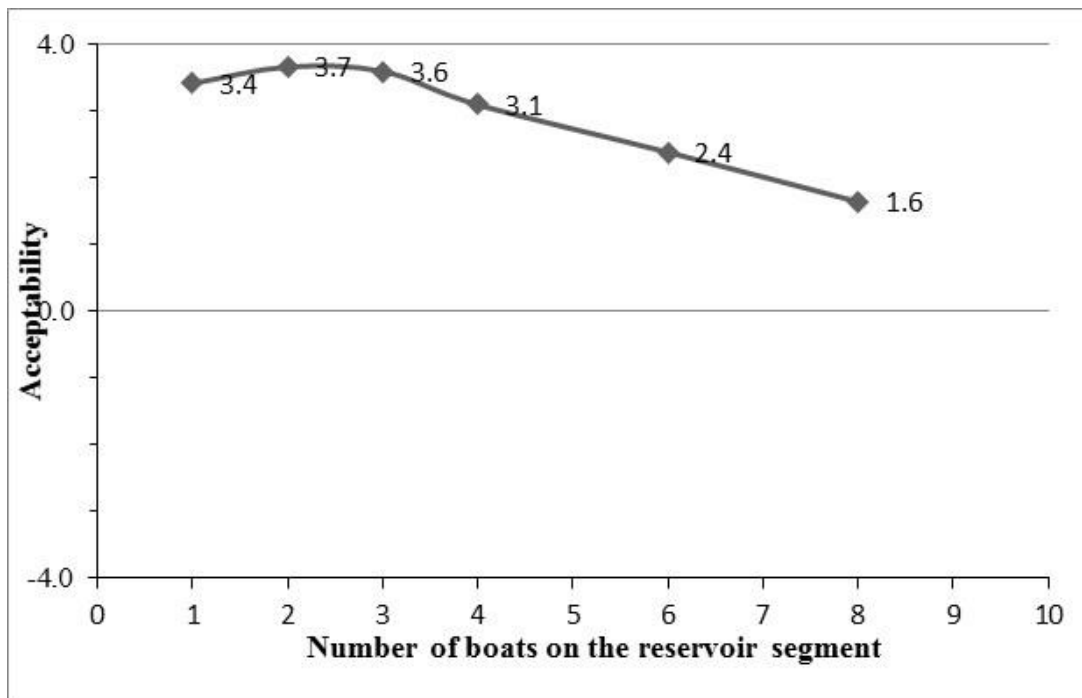


Figure B.18.a.1 Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at CBRA

Table B.18.a.2 Frenchman Coulee Recreation Area

	N	Mean	SD
Photo 1	2	-0.5	4.9
Photo 2	2	-0.5	4.9
Photo 3	1	-4.0	-
Photo 4	1	-4.0	-
Photo 5	1	-4.0	-
Photo 6	1	-4.0	-

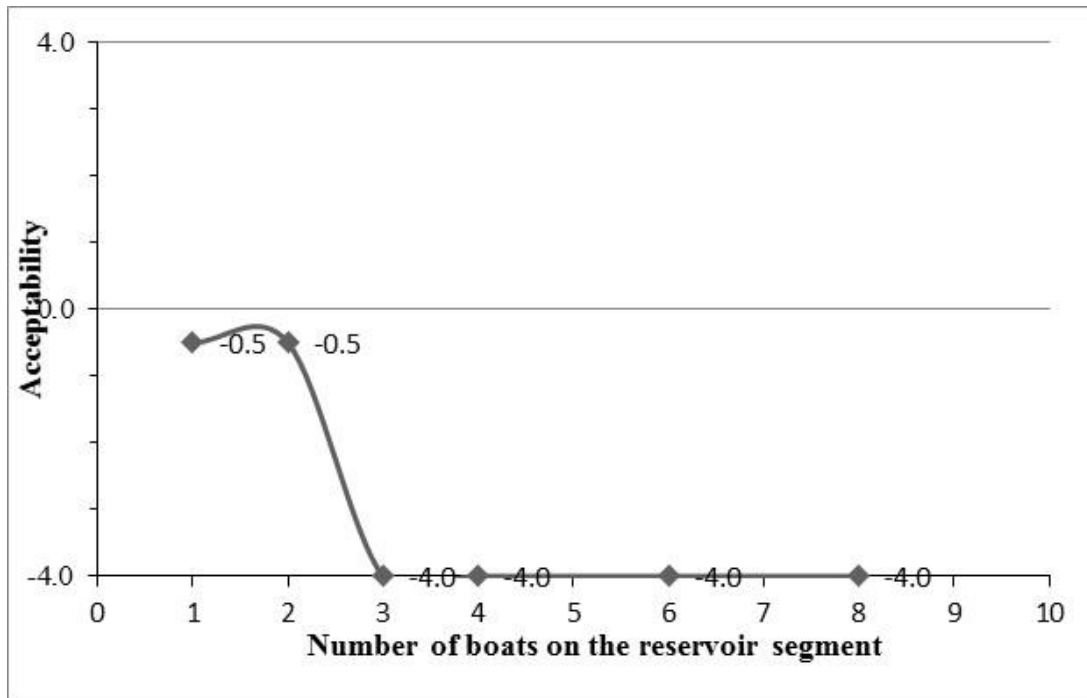


Figure B.18.a.2 Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at Frenchman Coulee Recreation Area

Table B.18.a.3 Huntzinger Road Boat Launch

	N	Mean	SD
Photo 1	3	4.0	0.0
Photo 2	3	4.0	0.0
Photo 3	3	4.0	0.0
Photo 4	3	4.0	0.0
Photo 5	3	2.7	2.3
Photo 6	3	2.0	3.5

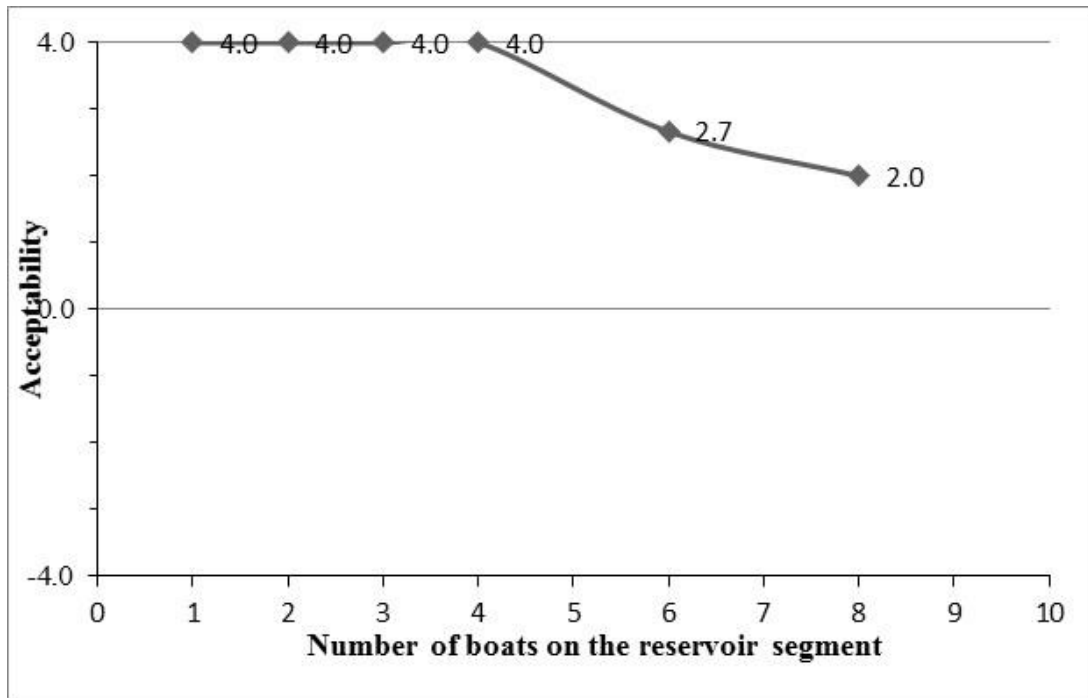


Figure B.18.a.3 Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at Huntzinger Road Boat Launch

Table B.18.a.4 Jackson Creek Fish Camp

	N	Mean	SD
Photo 1	1	0	-
Photo 2	1	0	-
Photo 3	1	0	-
Photo 4	1	0	-
Photo 5	1	0	-
Photo 6	1	0	-

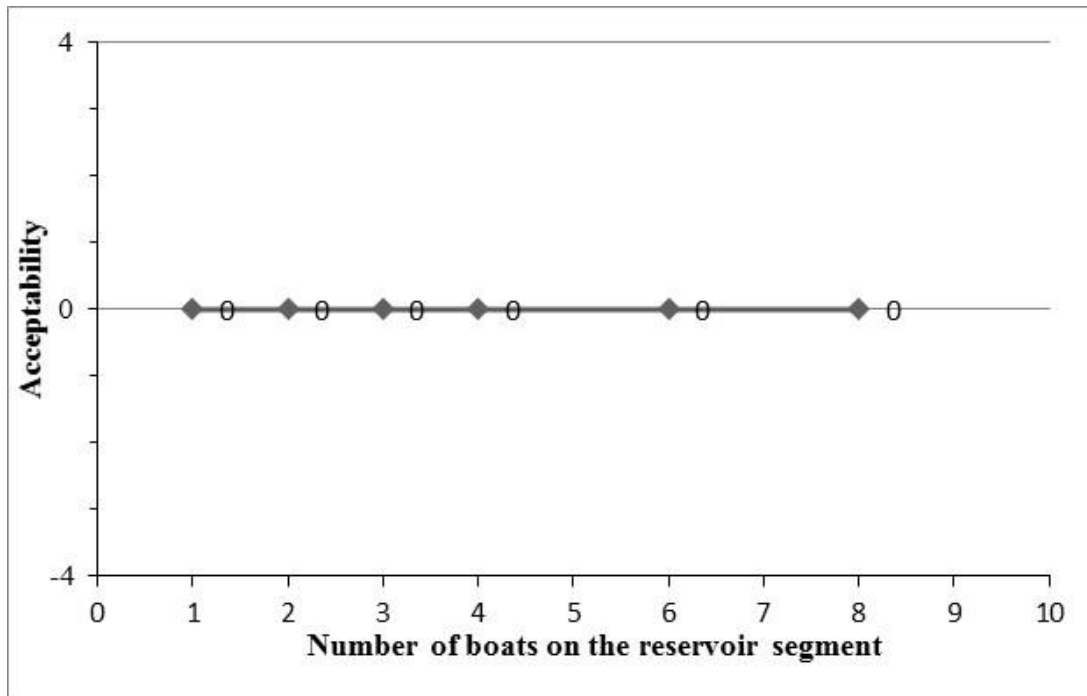


Figure B.18.a.4 Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at Jackson Creek Fish Camp

Table B.18.a.5 PRRA

	N	Mean	SD
Photo 1	17	3.2	1.6
Photo 2	17	3.2	1.4
Photo 3	17	2.8	1.4
Photo 4	17	2.2	1.9
Photo 5	17	0.5	2.6
Photo 6	17	-0.1	2.6

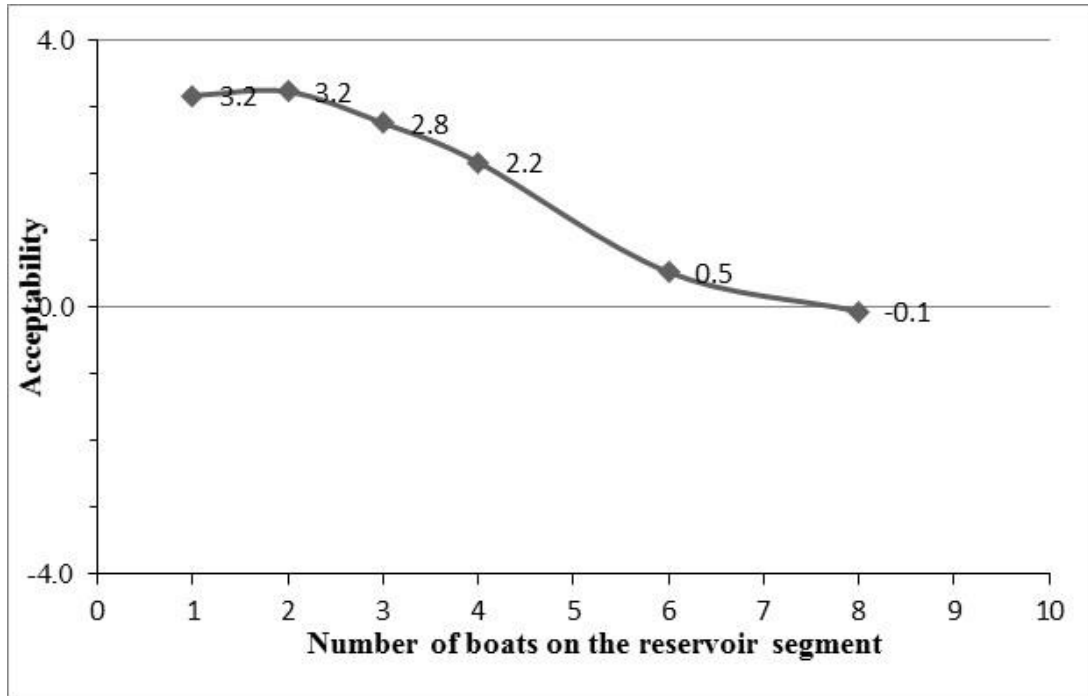


Figure B.18.a.5 Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at Jackson Creek Fish Camp

Table B.18.a.6 Quilomene Dune & Bay

	N	Mean	SD
Photo 1	80	3.5	1.4
Photo 2	80	3.5	1.4
Photo 3	80	3.3	1.5
Photo 4	77	3.2	1.6
Photo 5	82	2.6	2.1
Photo 6	81	2.3	2.5

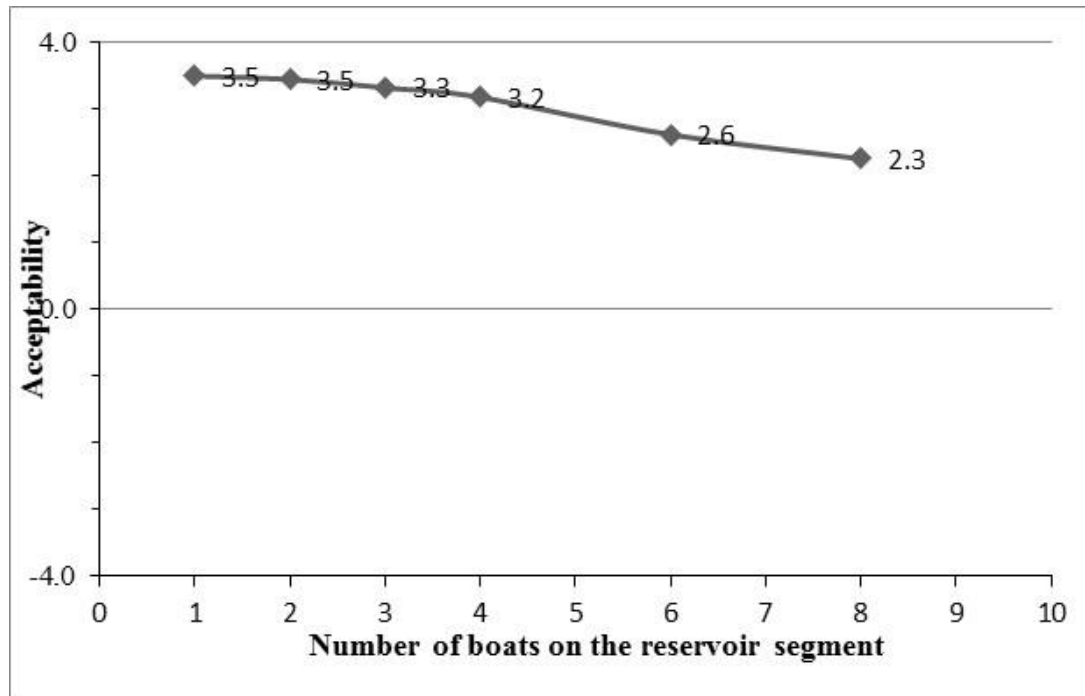


Figure B.18.a.6 Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at Quilomene Dune & Bay

Table B.18.a.7 Rocky Coulee

	N	Mean	SD
Photo 1	2	1.5	3.5
Photo 2	2	2.5	2.1
Photo 3	2	2.5	2.1
Photo 4	2	3.0	1.4
Photo 5	2	2.0	0.0
Photo 6	2	1.0	1.4

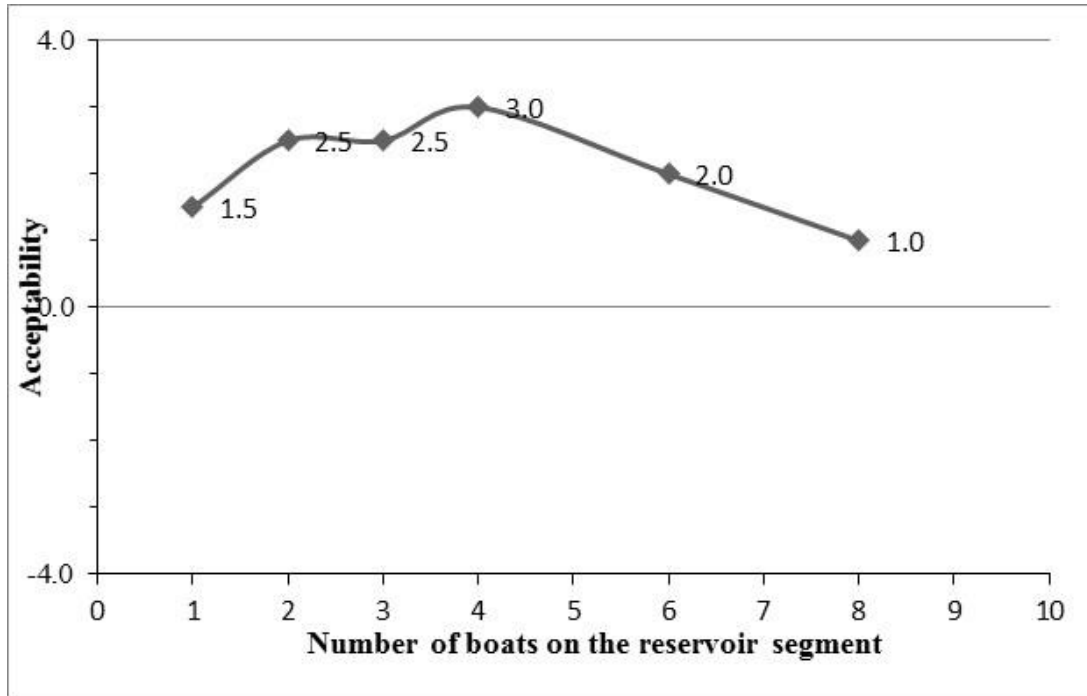


Figure B.18.a.7 Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at Rocky Coulee

Table B.18.a.8 Sunland Boat Launch

	N	Mean	SD
Photo 1	11	3.7	0.6
Photo 2	11	3.8	0.6
Photo 3	10	3.3	0.8
Photo 4	11	3.2	1.1
Photo 5	11	2.5	1.8
Photo 6	11	1.7	2.6

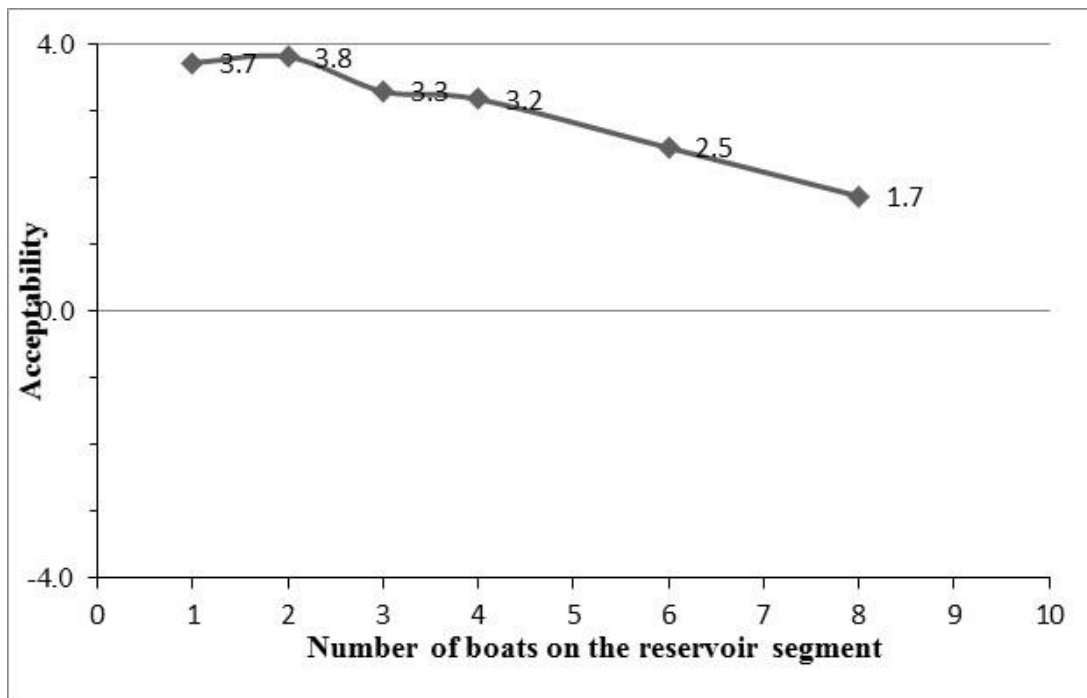


Figure B.18.a.8 Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at Sunland Boat Launch

Table B.18.a.9 Vantage Boat Launch

	N	Mean	SD
Photo 1	20	3.9	0.3
Photo 2	20	3.9	0.4
Photo 3	20	3.7	0.7
Photo 4	20	3.4	1.3
Photo 5	20	2.7	1.8
Photo 6	20	2.5	2.3

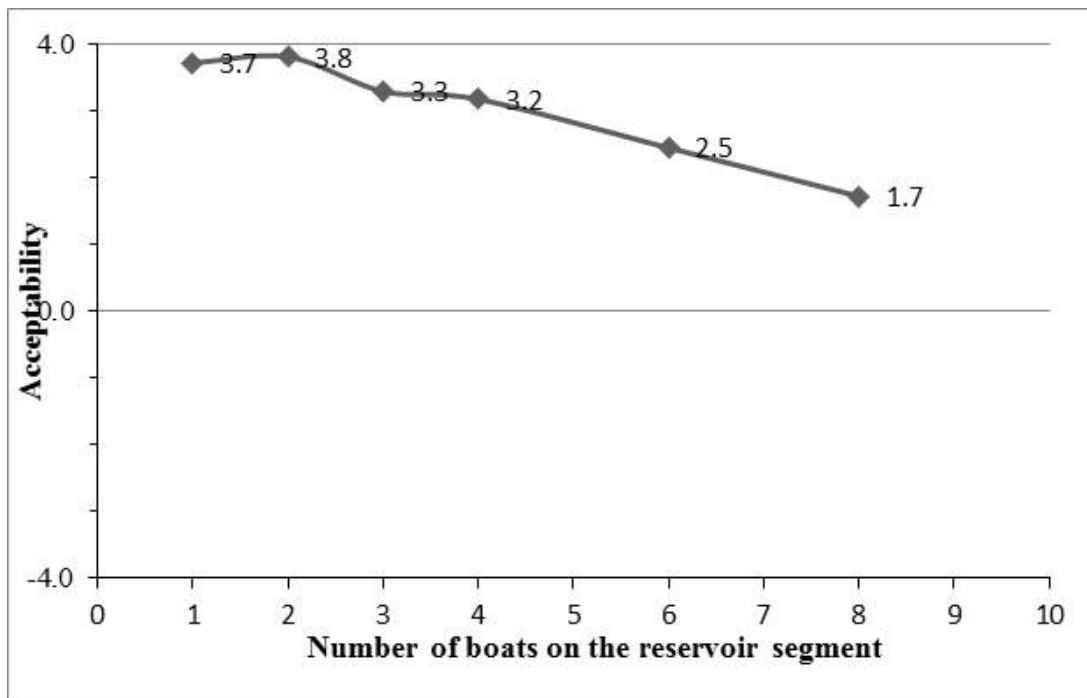


Figure B.18.a.9 Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at Vantage Boat Launch

Table B.18.a.10 Wanapum Dam Lower Boat Launch

	N	Mean	SD
Photo 1	6	0.7	2.5
Photo 2	6	0.5	2.3
Photo 3	6	0.5	2.3
Photo 4	6	0.3	2.3
Photo 5	6	0.3	2.3
Photo 6	6	0.3	2.3

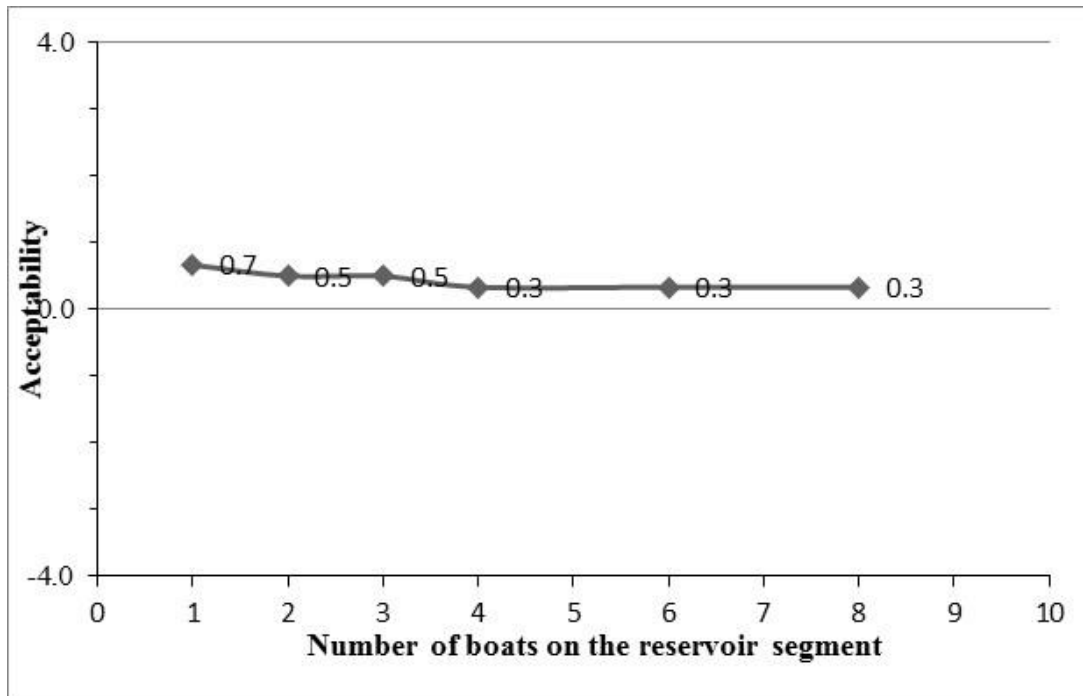


Figure B.18.a.10 Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at Wanapum Dam Lower Boat Launch

Table B.18.a.11 Wanapum Dam Upper Boat Launch

	N	Mean	SD
Photo 1	3	1.3	2.3
Photo 2	3	1.3	2.3
Photo 3	3	1.3	2.3
Photo 4	3	1.3	2.3
Photo 5	3	0.3	0.6
Photo 6	3	0.0	0.0

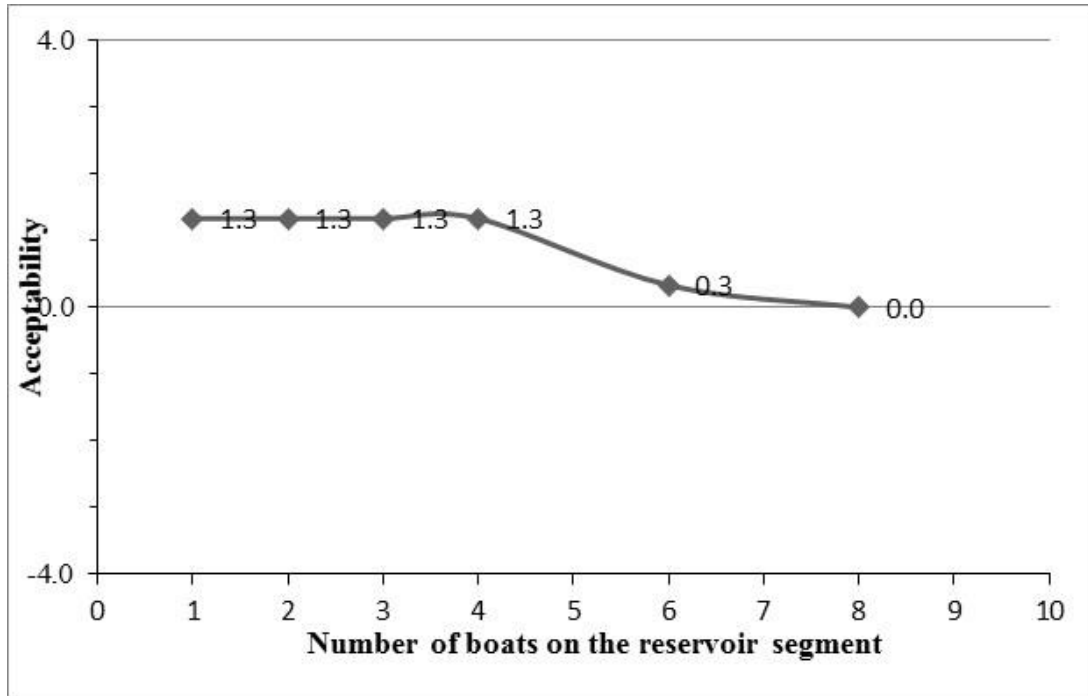


Figure B.18.a.11 Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at Wanapum Dam Upper Boat Launch

Table B.18.a.12 Wanapum Recreation Area (WSP)

	N	Mean	SD
Photo 1	14	2.9	2.2
Photo 2	13	2.8	2.3
Photo 3	13	2.6	2.3
Photo 4	13	2.4	2.4
Photo 5	14	1.9	2.5
Photo 6	14	1.3	2.7

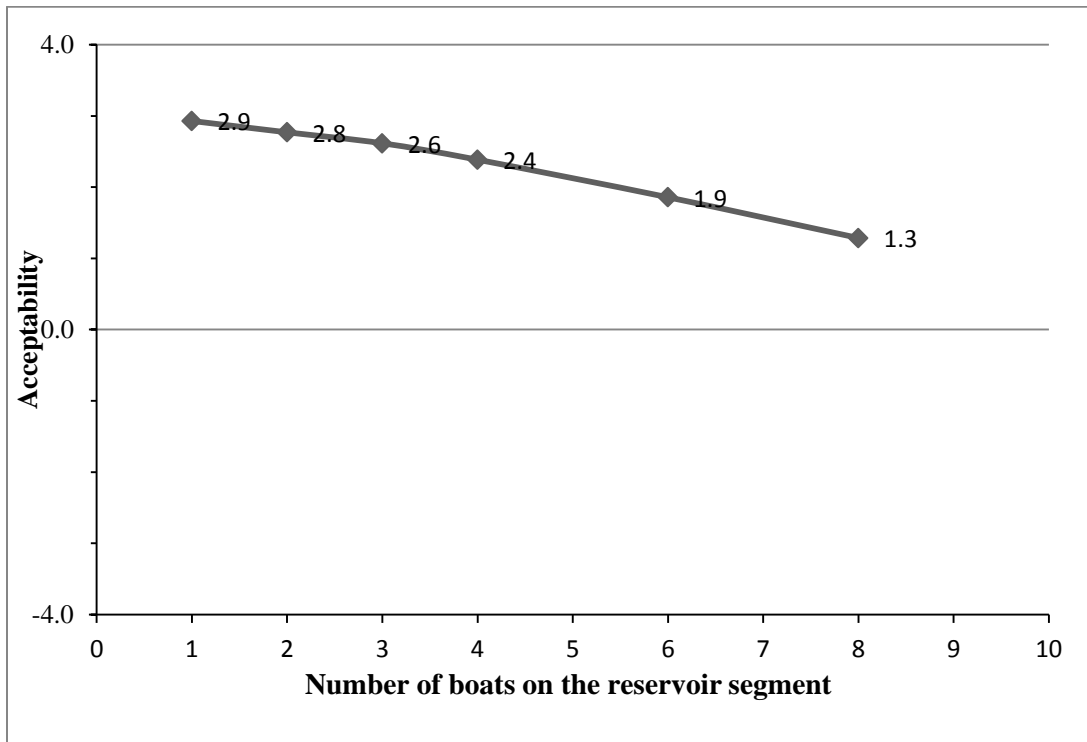


Figure B.18.a.12 Social norm curve for the acceptability of number of boats without feeling too crowded and unsafe at Wanapum Recreation Area (WSP)

Q18.b Site-level responses to the question

“Which photo shows the highest number of boats that should be allowed on the reservoir segments you used today? In other words, at what point should boats be restricted from using the reservoir because it is too crowded and unsafe? (If you think use should not be restricted, please indicate)”

Table B.18.b Highest number of boats to be allowed on the reservoir segment

Site	Photo 1	Photo 2	Photo 3	Photo 4	Photo 5	Photo 6	Mean	SD
CBRA	-	13.3%	-	26.7%	40.0%	20.0%	4.5	1.2
PRRA	12.5%	-	12.5%	37.5%	25.0%	12.5%	4.0	1.5
Quilomene Dune & Bay	-	-	13.0%	13.0%	17.4%	56.5%	5.2	1.1
Rocky Coulee	-	-	100.0%	-	-	-	3.0	-
Sunland Boat Launch	-	-	-	50.0%	50.0%	-	4.5	0.7
Vantage Boat Launch	14.3%	28.6%	-	-	28.6%	28.6%	3.9	2.1
Wanapum Dam Lower Boat Launch	-	-	-	-	100.0%	-	5.0	-
Wanapum Recreation Area (WSP)	-	14.3%	14.3%	-	-	71.4%	5.0	1.7

Q18.bb Management unit level responses to the question

“None of the photos show a high enough number of boats to restrict use” (check box if you agree)

Table B.18.bb Agreement that none of the photos show a high enough number of boats to restrict use

Site	Yes	No	N
CBRA	55.6%	44.4%	27
Huntzinger Road Boat Launch	100.0%	-	3
PRRA	50.0%	50.0%	14
Quilomene Dune & Bay	71.3%	28.8%	80
Rocky Coulee	-	100.0%	2
Sand Hollow	100.0%	-	1
Sunland Boat Launch	71.4%	28.6%	7
Vantage Boat Launch	64.7%	35.3%	17
Wanapum Dam Lower Boat Launch	100.0%	-	5
Wanapum Dam Overlook	100.0%	-	1
Wanapum Dam Upper Boat Launch	100.0%	-	3
Wanapum Recreation Area (WSP)	63.6%	36.4%	11

Q18.c Management unit level responses to the question

“Which photo looks most like the number of boats you typically saw on the reservoir segments you used today?”

Table A-B.18.c Photo that reflects number of boats seen on the reservoir

	Photo 1	Photo 2	Photo 3	Photo 4	Photo 5	Photo 6	Mean	SD	N
CBRA	12.0%	16.0%	16.0%	40.0%	4.0%	12.0%	3.44	1.474	25
Huntzinger Road Boat Launch	66.7%	33.3%	-	-	-	-	1.33	.577	3
PRRA	23.5%	29.4%	29.4%	5.9%	5.9%	5.9%	2.59	1.417	17
Quilomene Dune & Bay	6.0%	11.9%	13.4%	13.4%	17.9%	37.3%	4.37	1.650	67
Rocky Coulee	-	-	100.0%	-	-	-	3.00	-	1
Sunland Boat Launch	10.0%	20.0%	20.0%	-	10.0%	40.0%	4.00	2.000	10
Vantage Boat Launch	35.7%	28.6%	7.1%	14.3%		14.3%	2.57	1.785	14
Wanapum Dam Lower Boat Launch	-	-	-	50.0%	50.0%	-	4.50	0.707	2
Wanapum Dam Upper Boat Launch	100.0%	-	-	-	-	-	1	-	1
Wanapum Recreation Area (WSP)	30.0%	-	30.0%	20.0%	-	20.0%	3.20	1.874	10

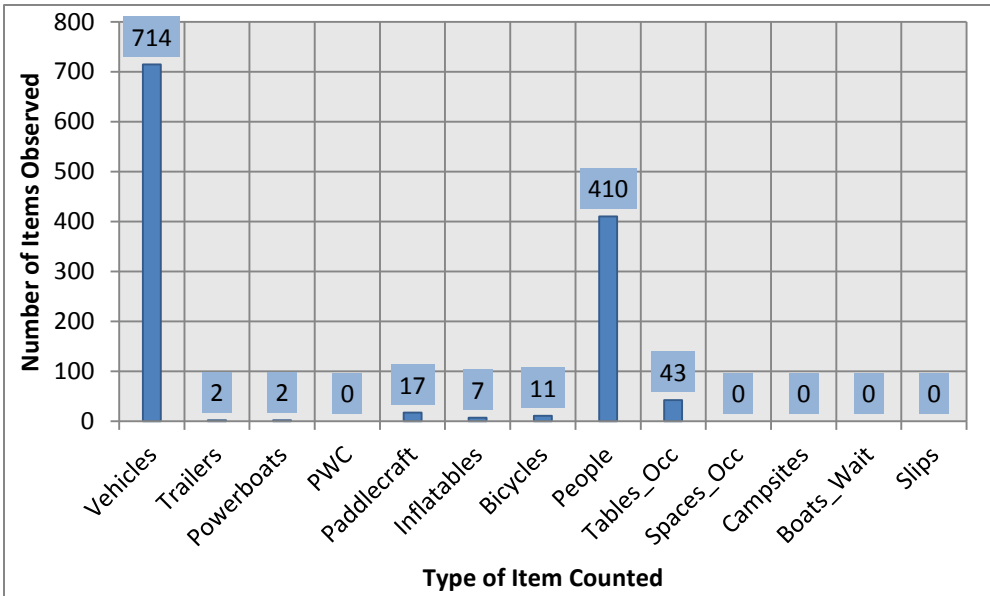
APPENDIX C

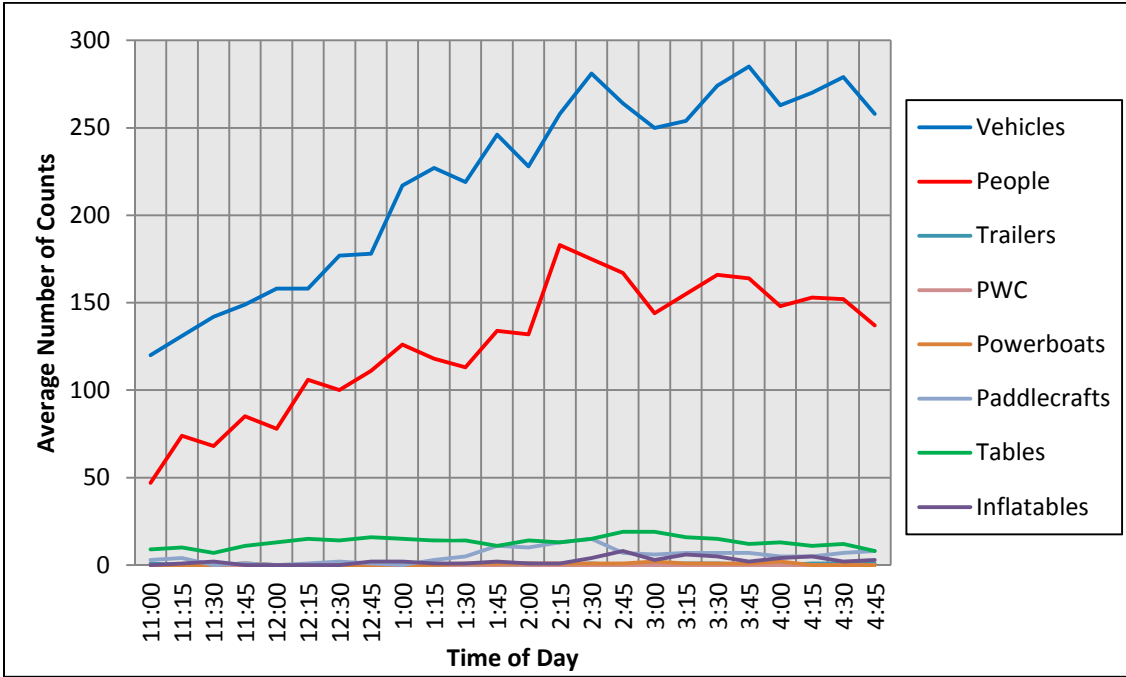
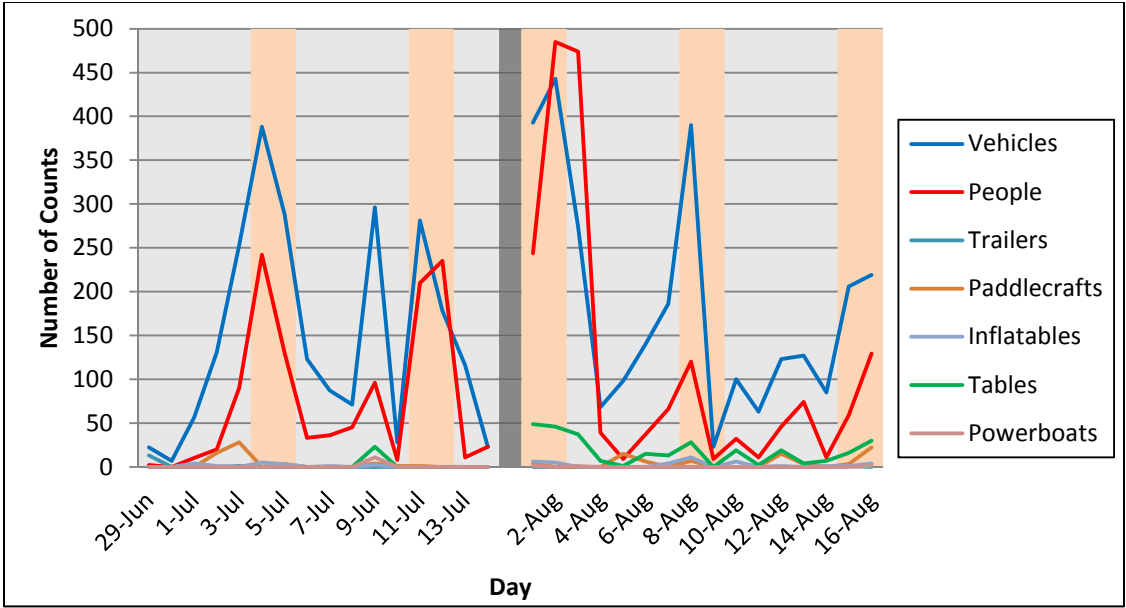
Site-level Use Count Results

CBRA On-Is. (Picnic Area)

Site Name: **CBRA On-Is.**

Amenities: **Picnic Area**

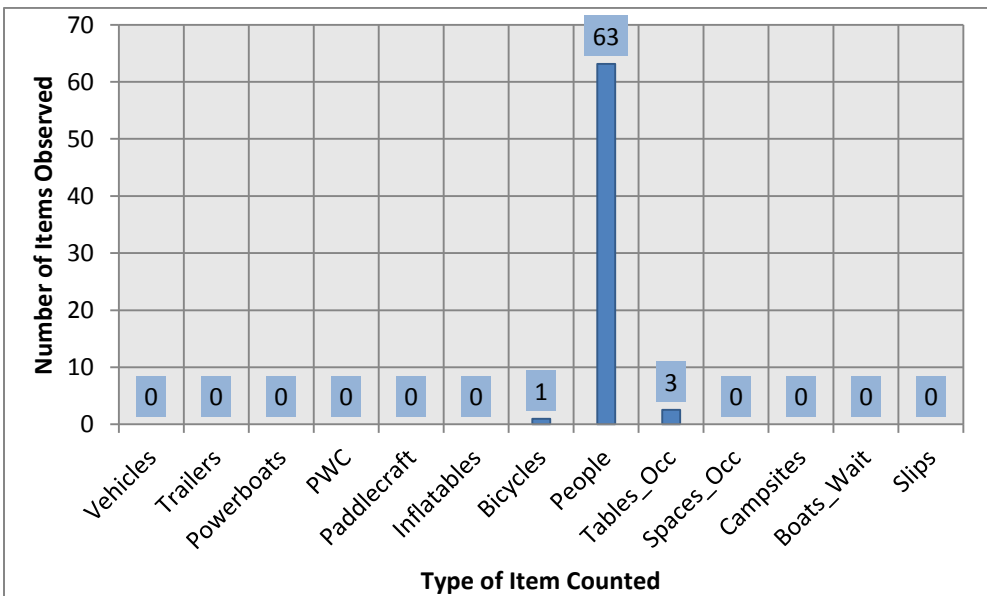


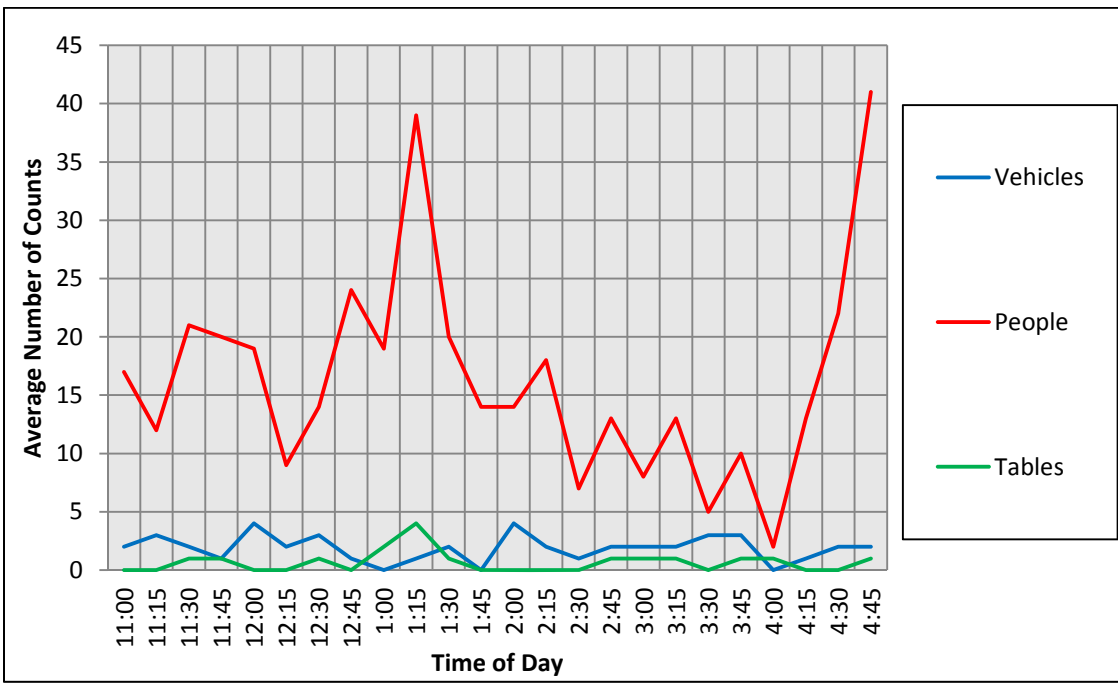
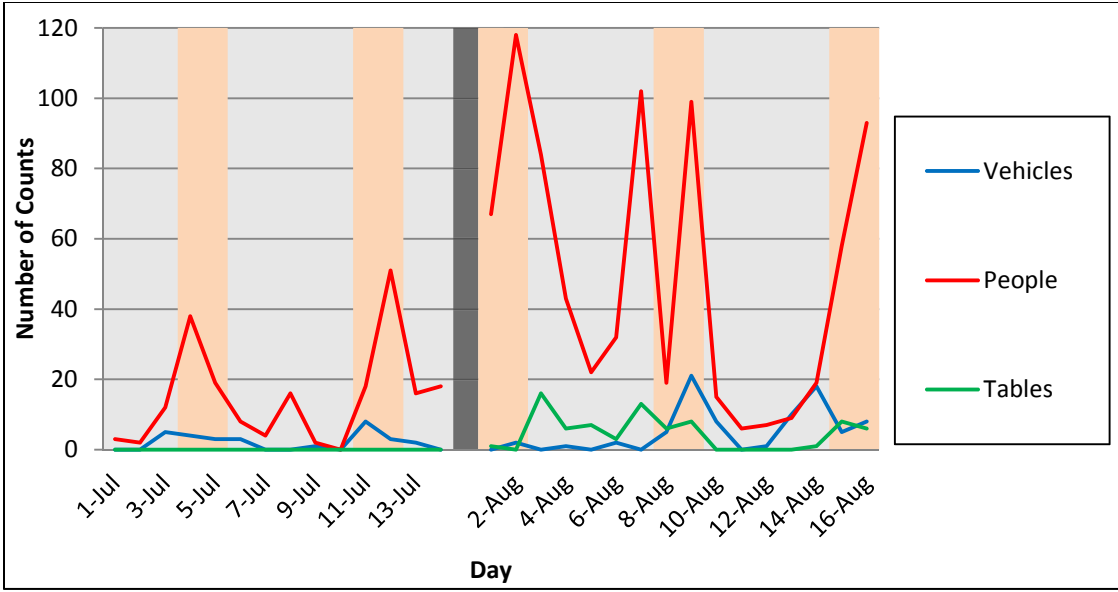


CBRA On-Is. (Active Recreation Area – Camera 1)

Site Name: **CBRA On-Is.**

Amenities: **Active Recreation Area**

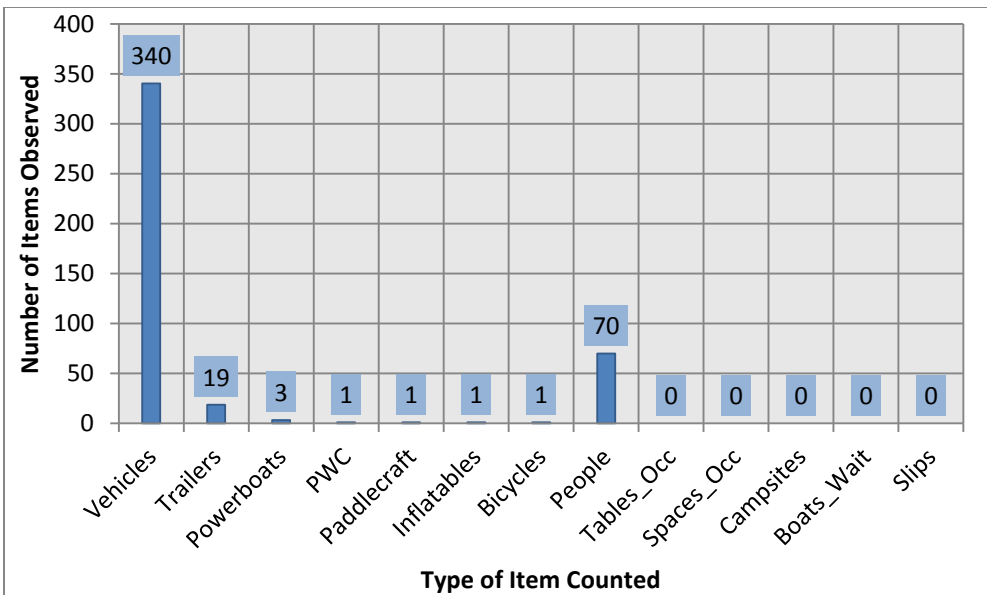


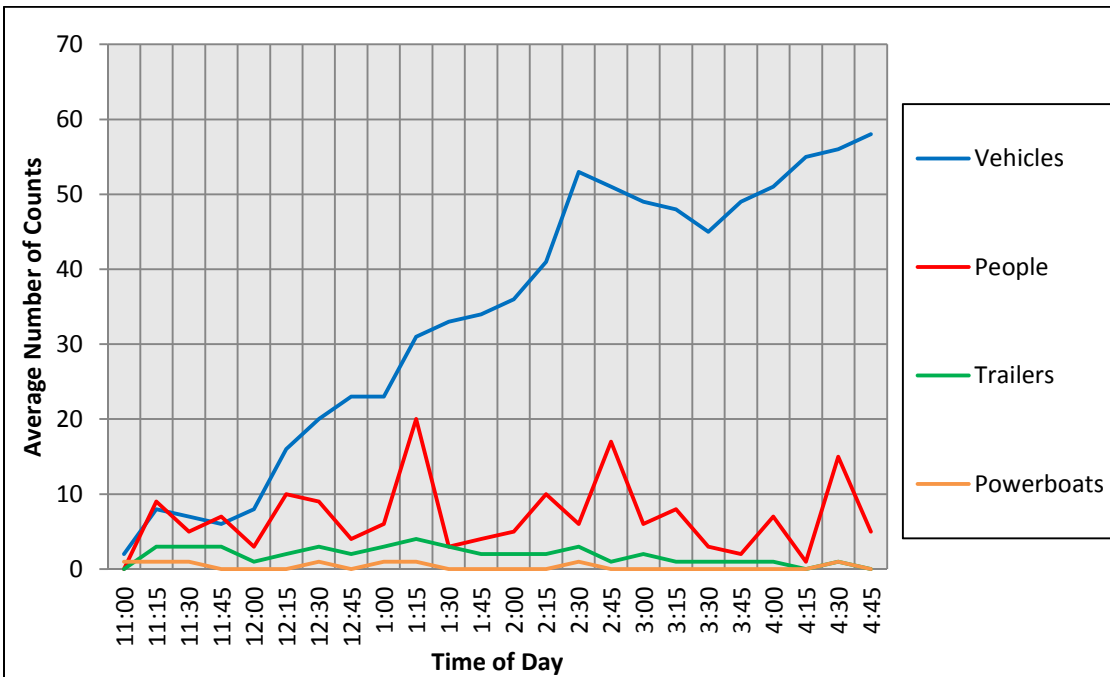
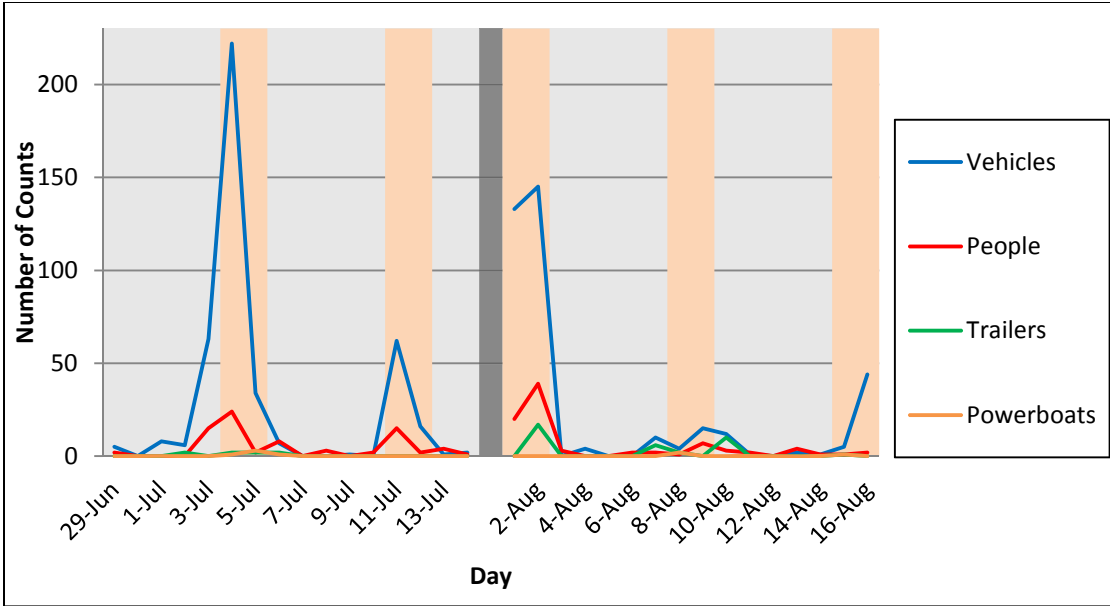


CBRA On-Is. (Active Recreation Area – Camera 2)

Site Name: **CBRA On-Is.**

Amenities: **Active Recreation Area**

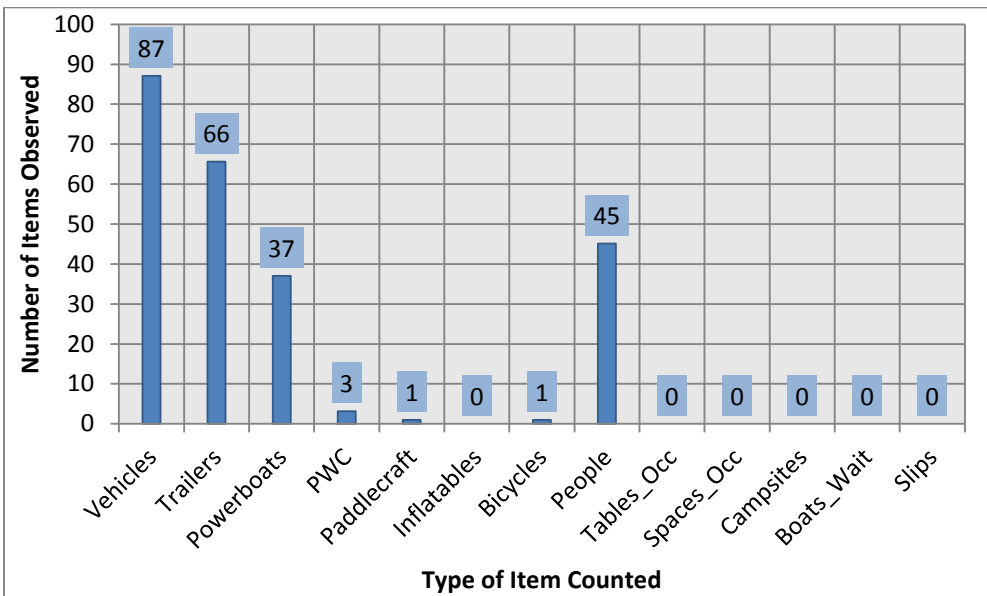


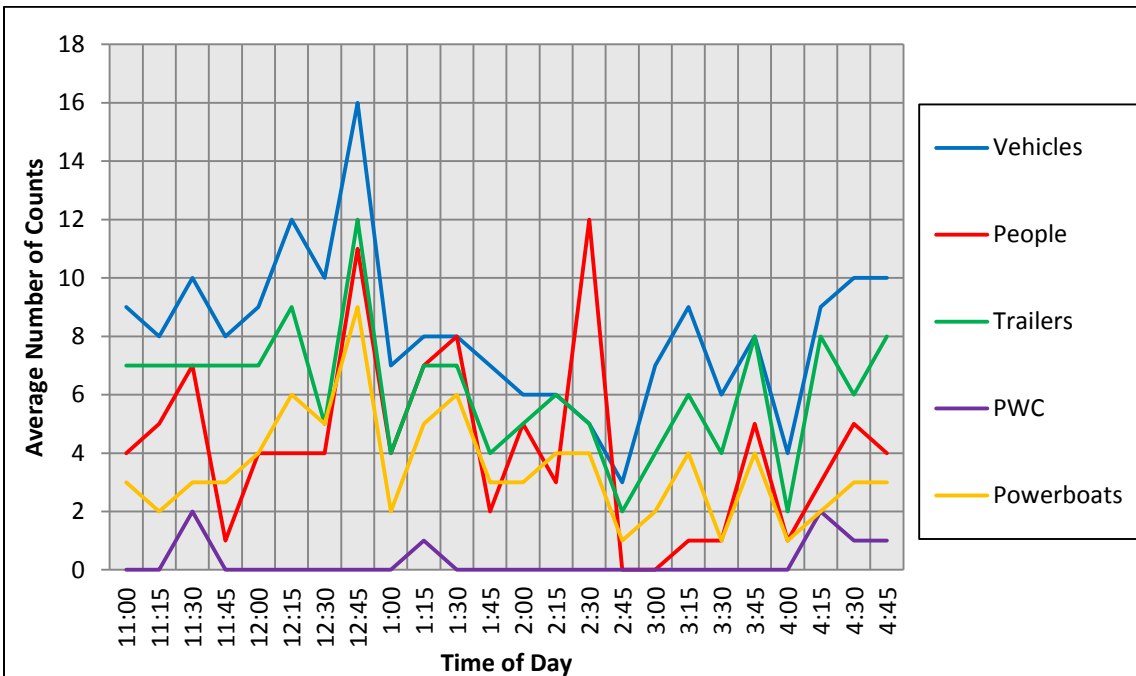
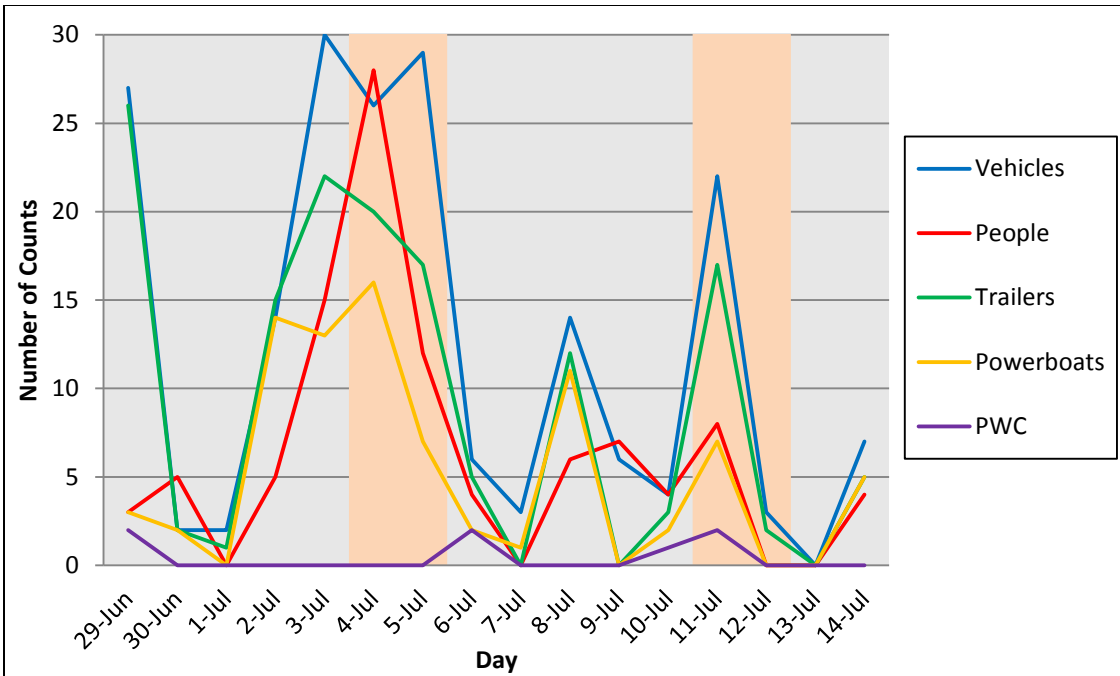


CBRA On-Is. (Boat Launch)

Site Name: **CBRA On-Is.**

Amenities: **Boat Launch**

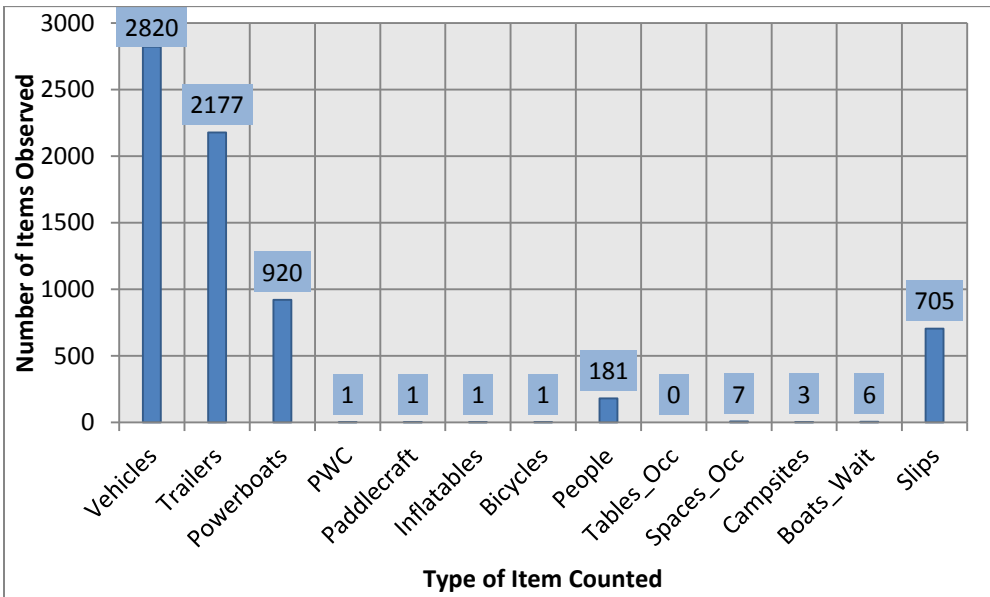


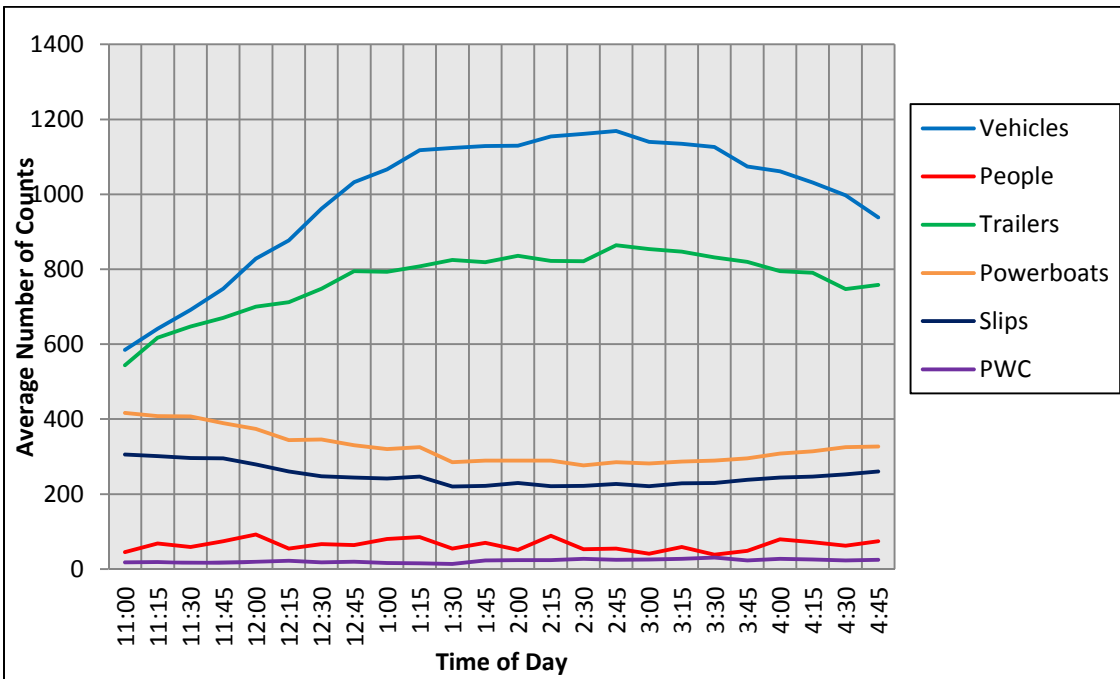
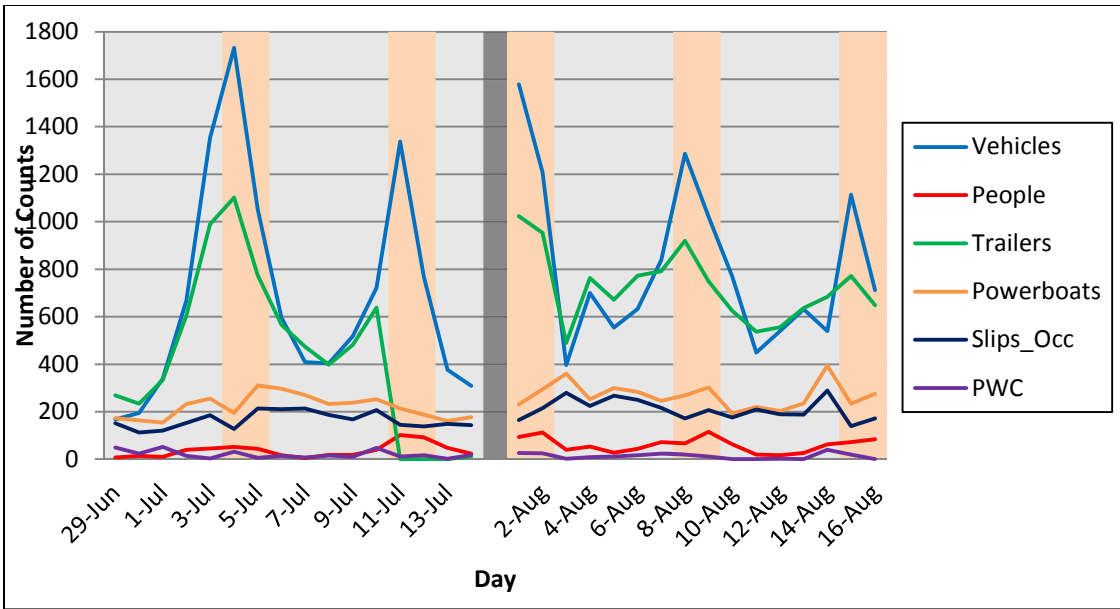


CBRA Off-Is. (Boat Launch)

Site Name: **CBRA Off-Is.**

Amenities: **Boat Launch**
Marina

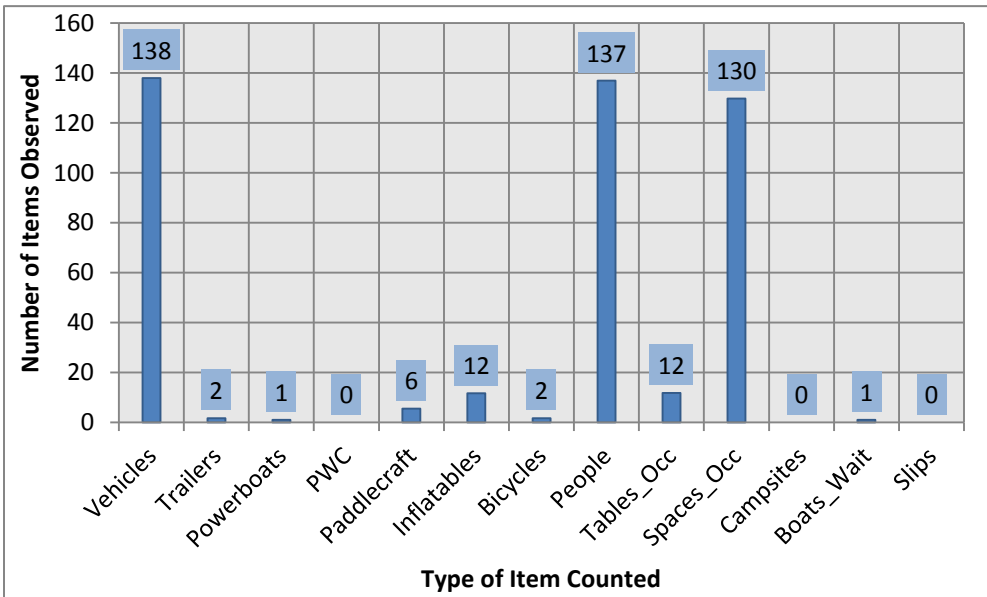
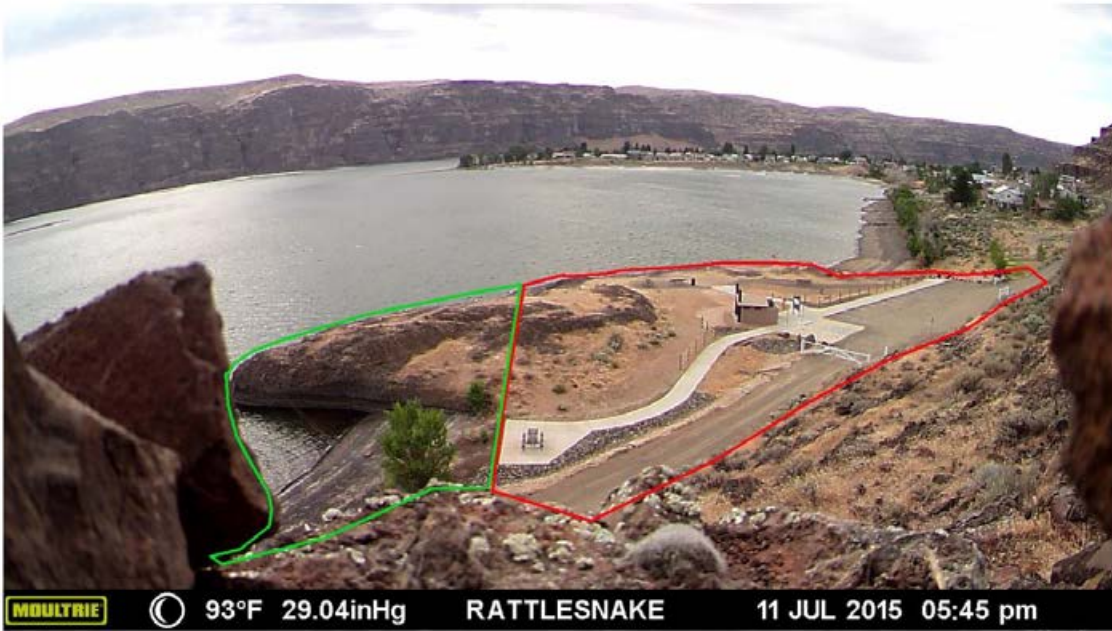


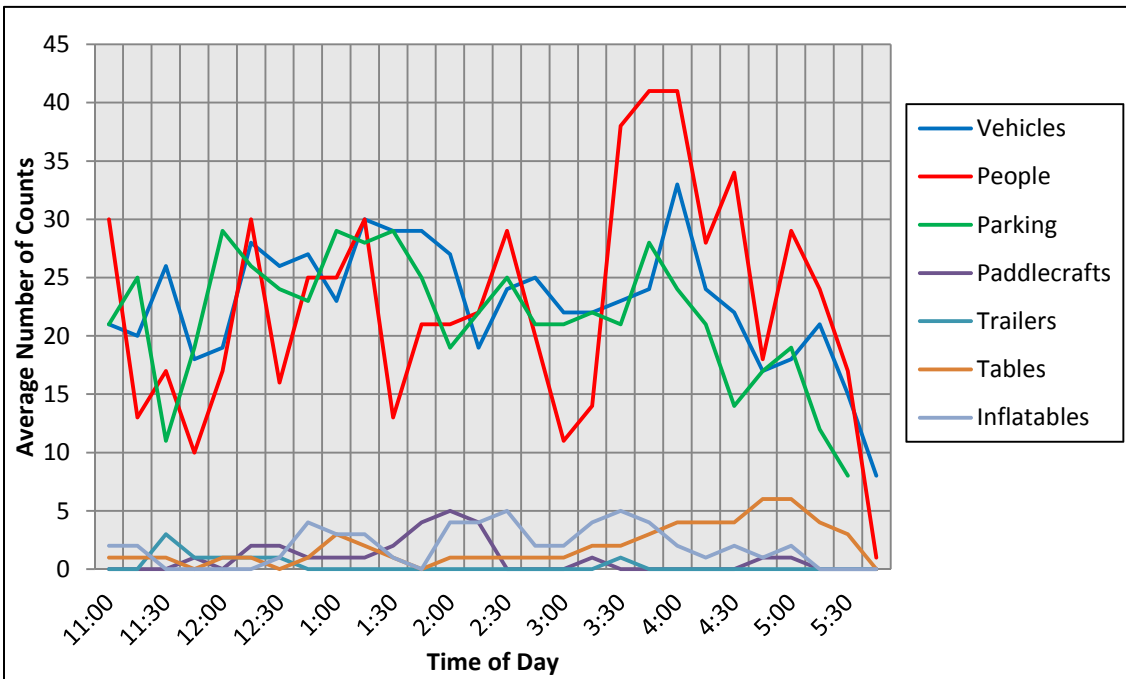
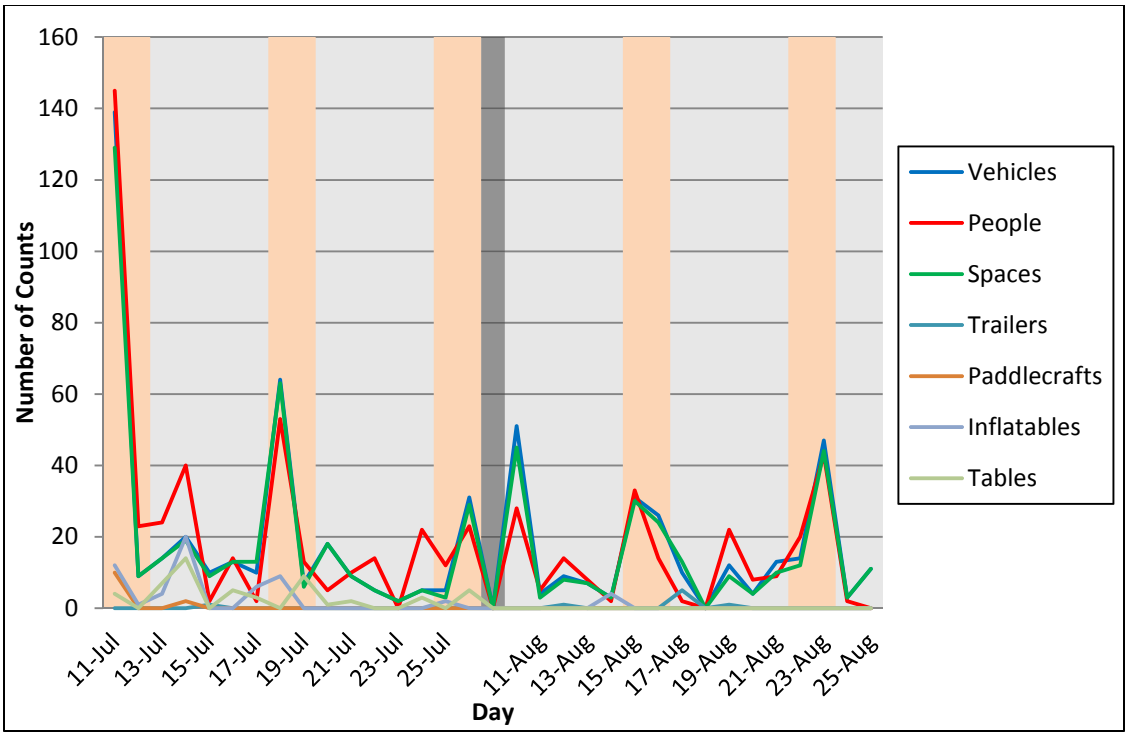


Rattlesnake Cove

Site Name: **Rattlesnake Cove**

Amenities: **Picnic Area**
Swim Area

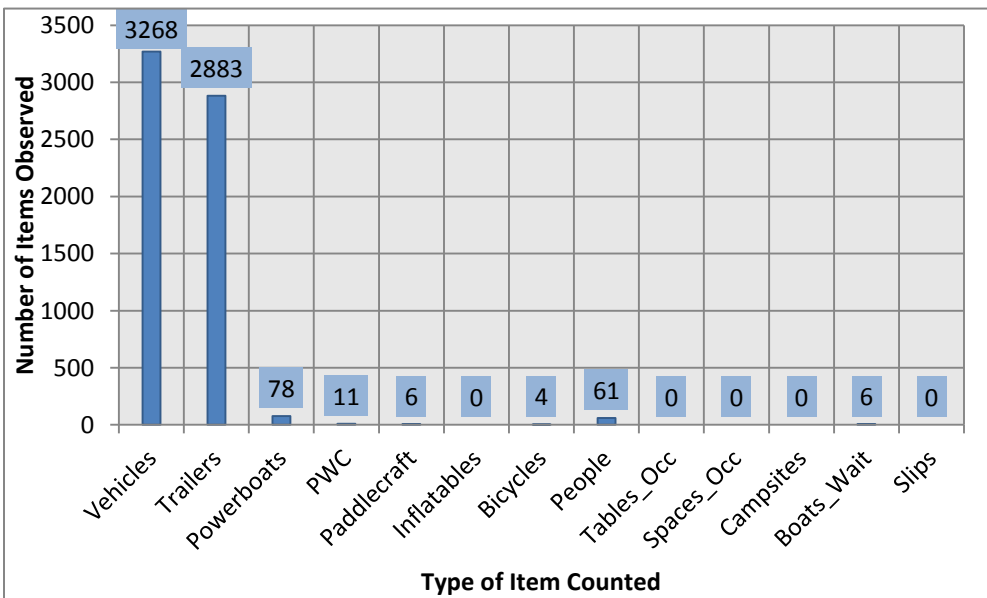


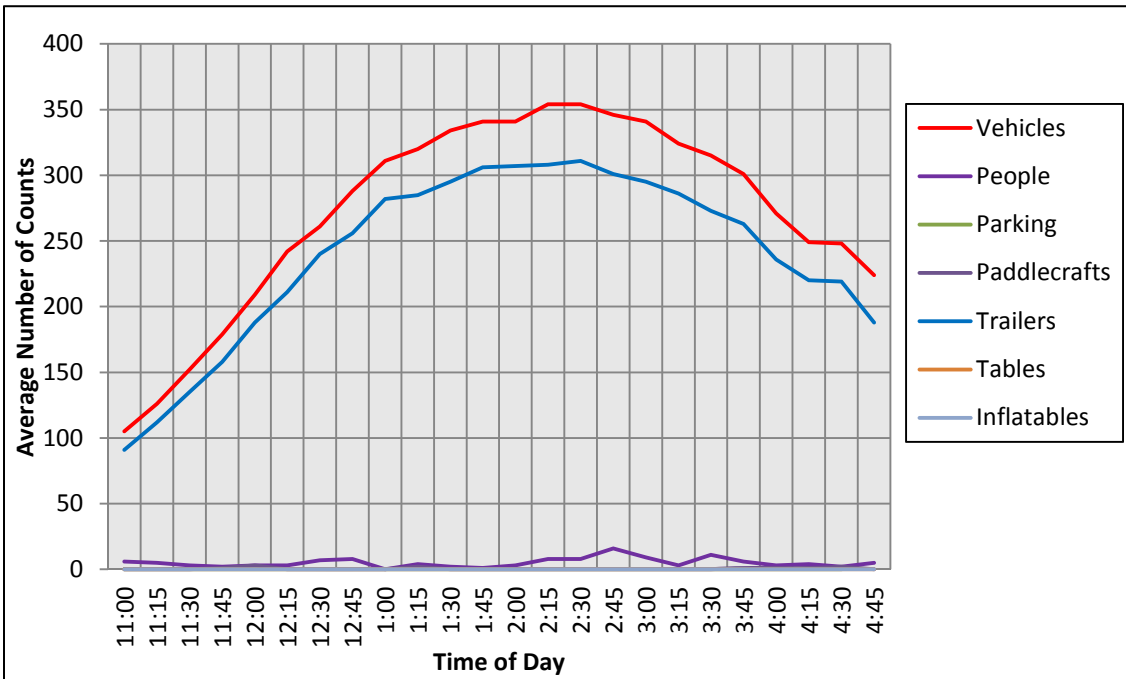
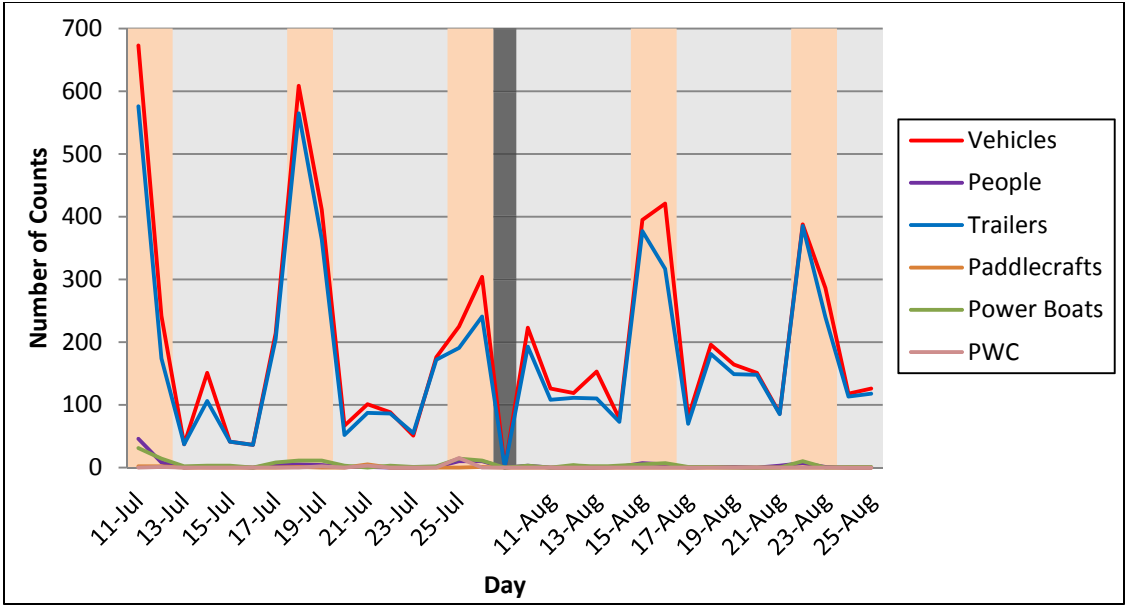


Sunland Boat Launch

Site Name: **Sunland Boat Launch**

Amenities: **Boat Launch**

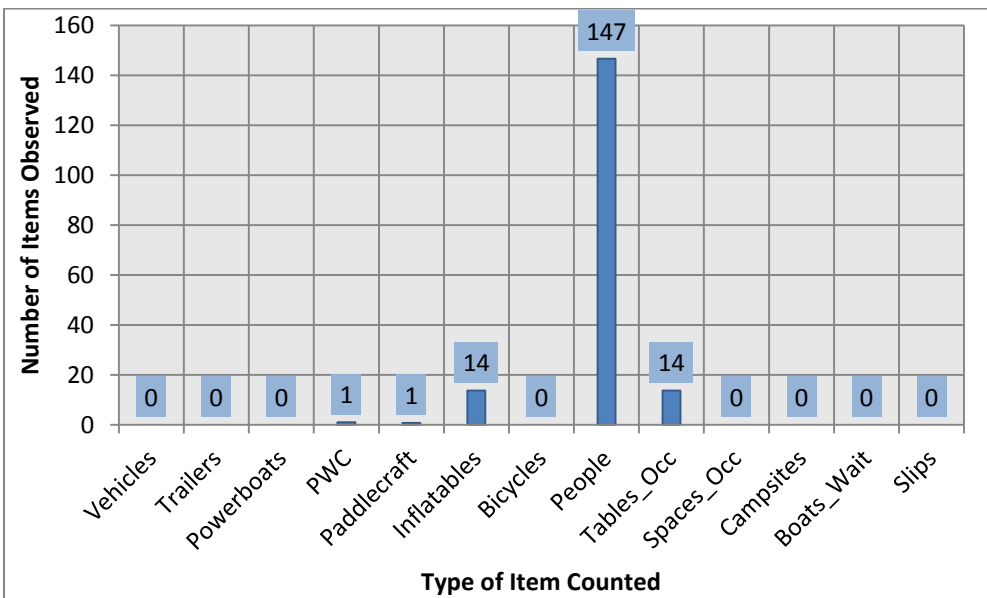
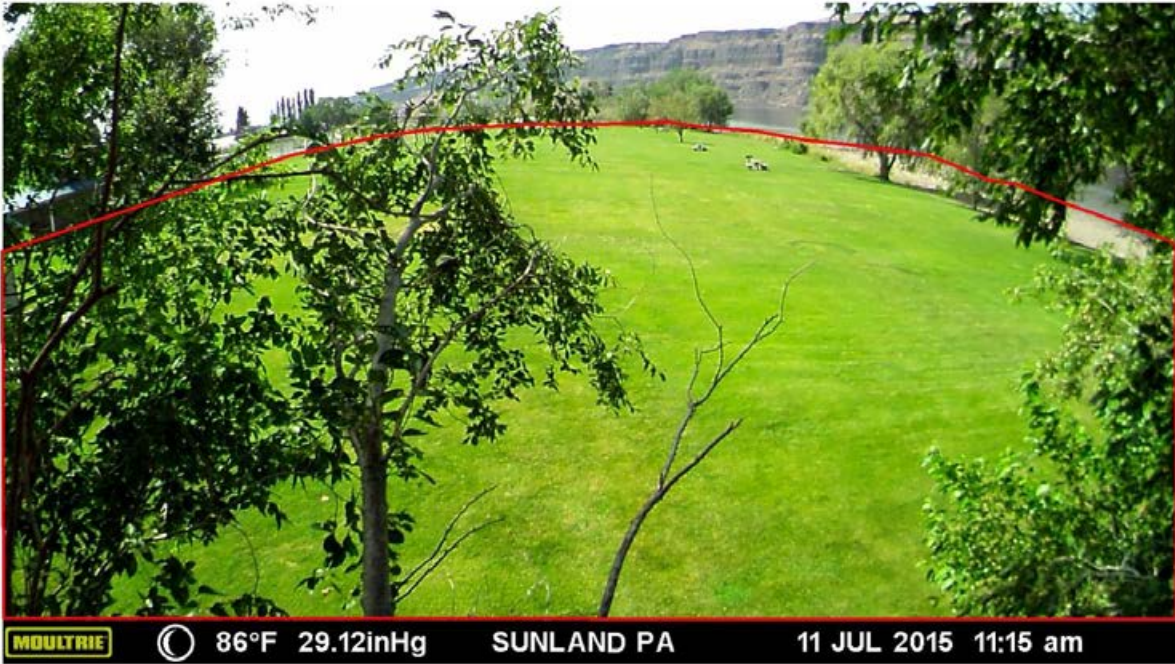


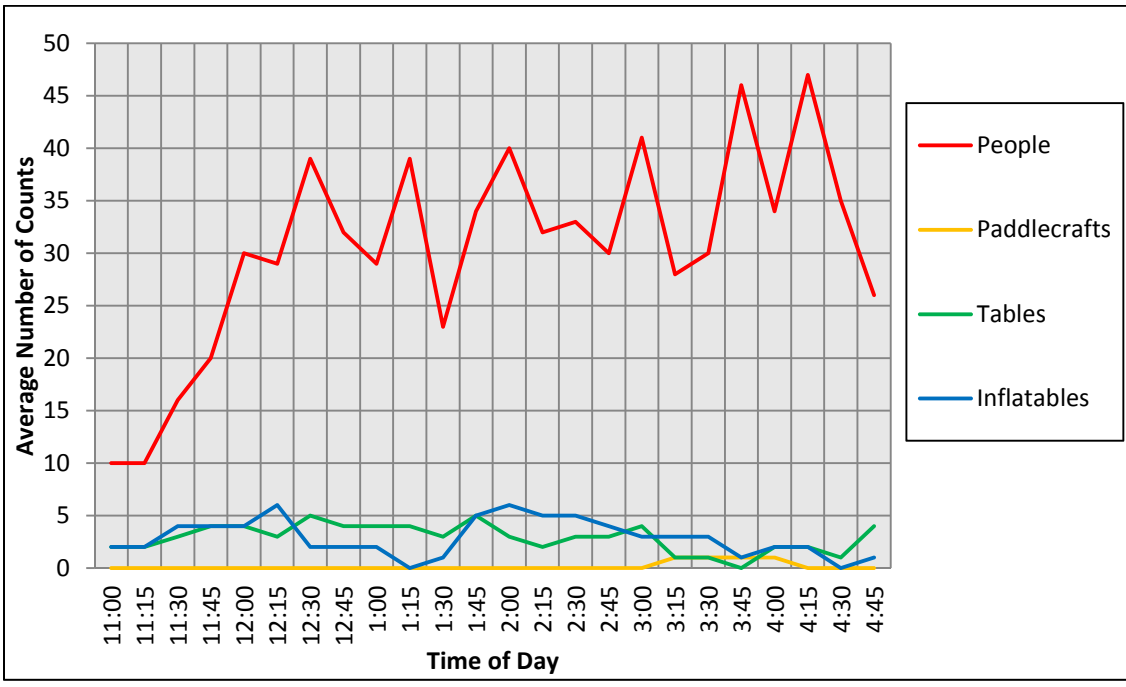
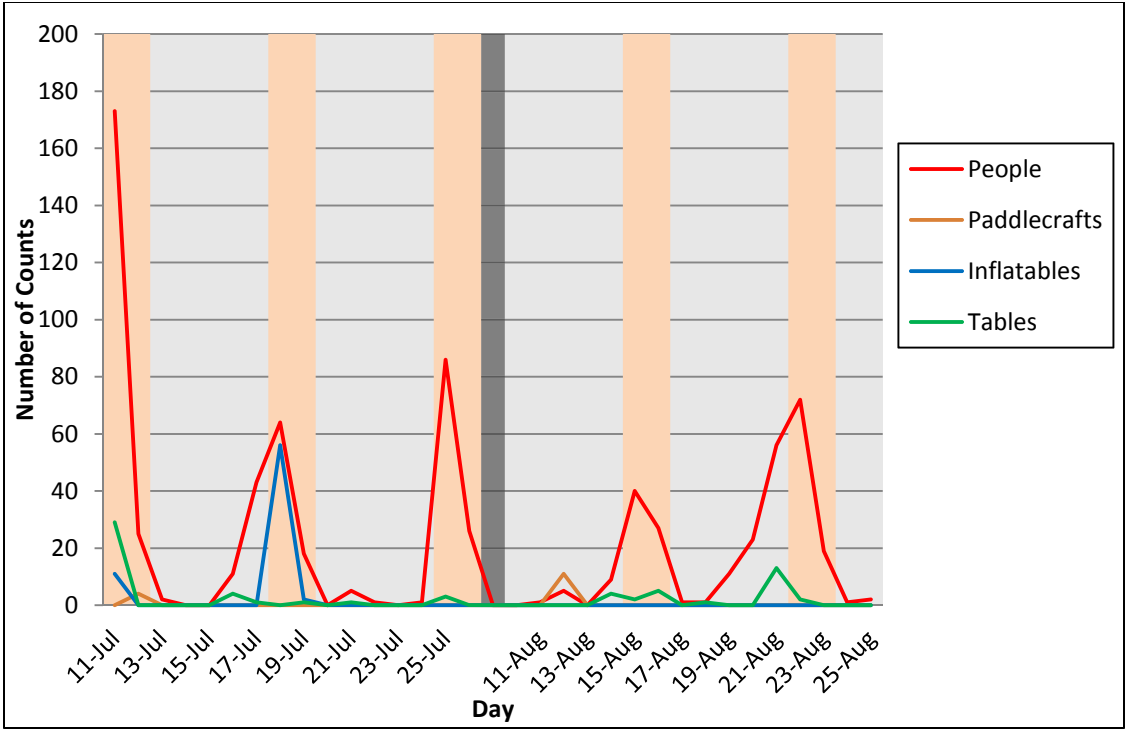


Sunland Picnic Area

Site Name: Sunland Picnic Area

Amenities: Picnic Area



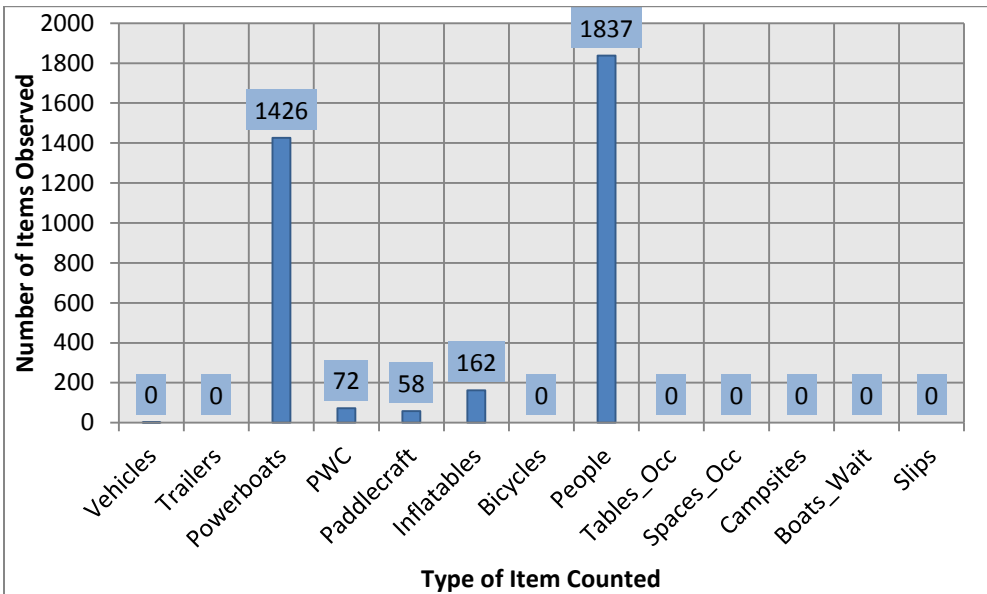


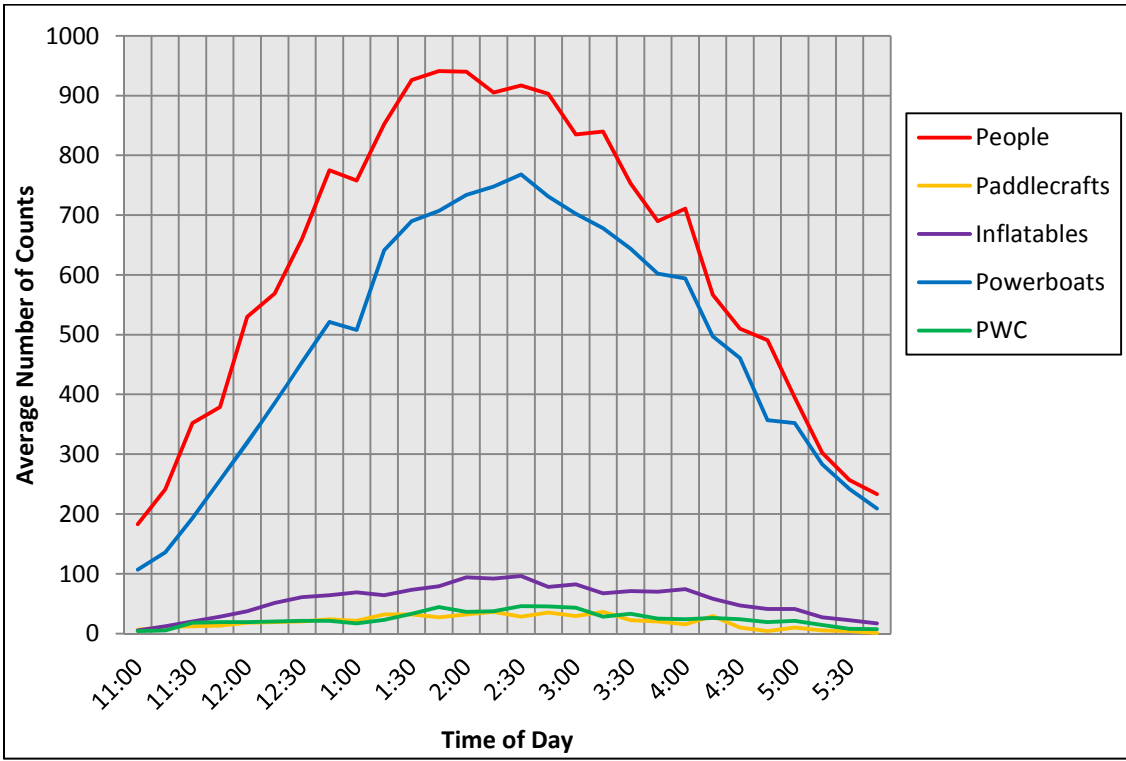
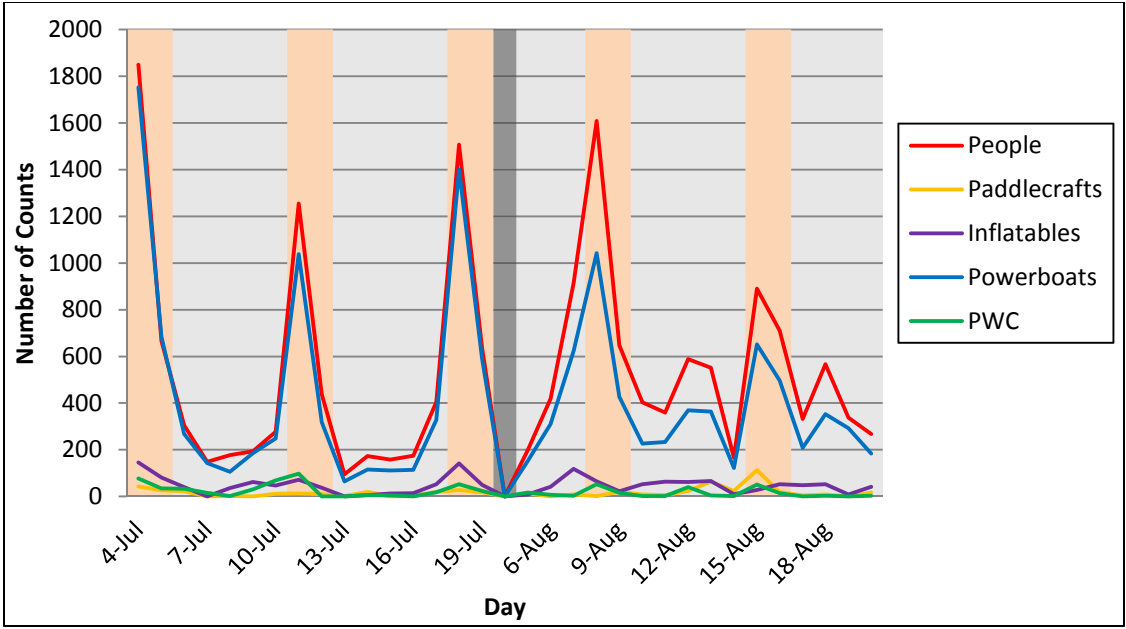
Quilomene Dune and Bay

Site Name: **Quilomene Dune and Bay**

Amenities: **Informal Use Area (Boat In)**

SPECIAL NOTES: Count boats or other watercraft (and accompanying people) within the boundary only IF they appear stationary AND another boat could not safely navigate around it on ALL sides

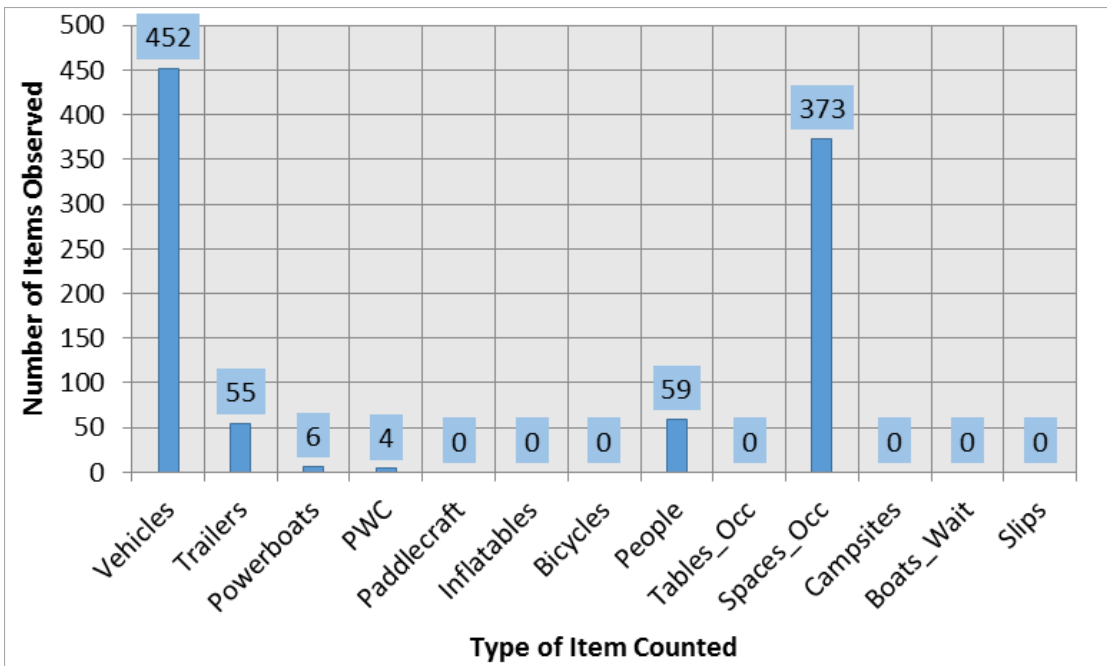
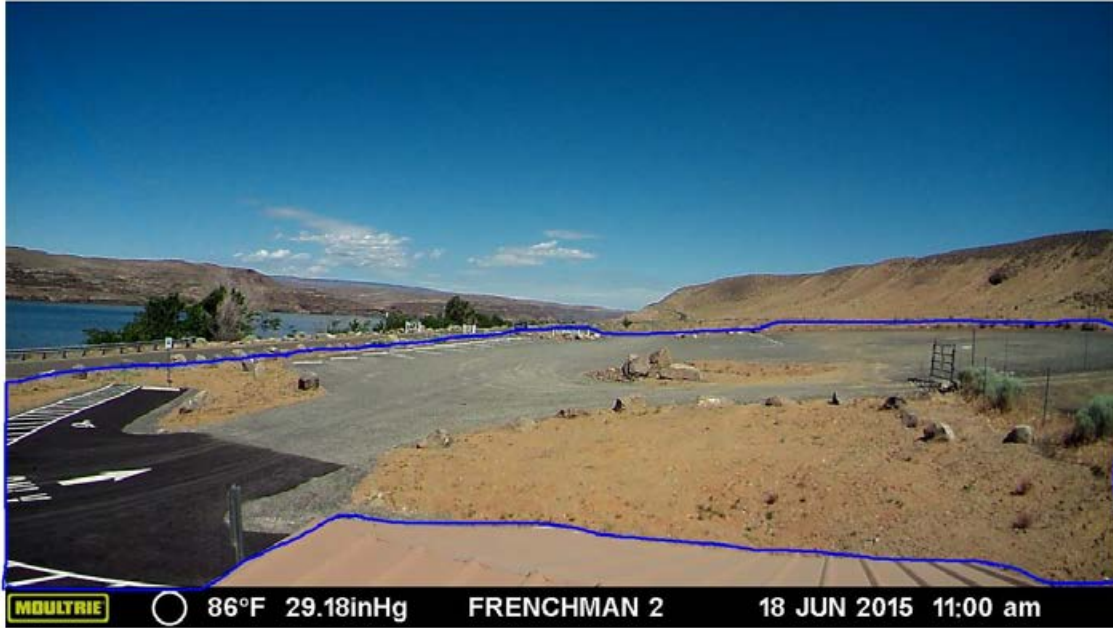


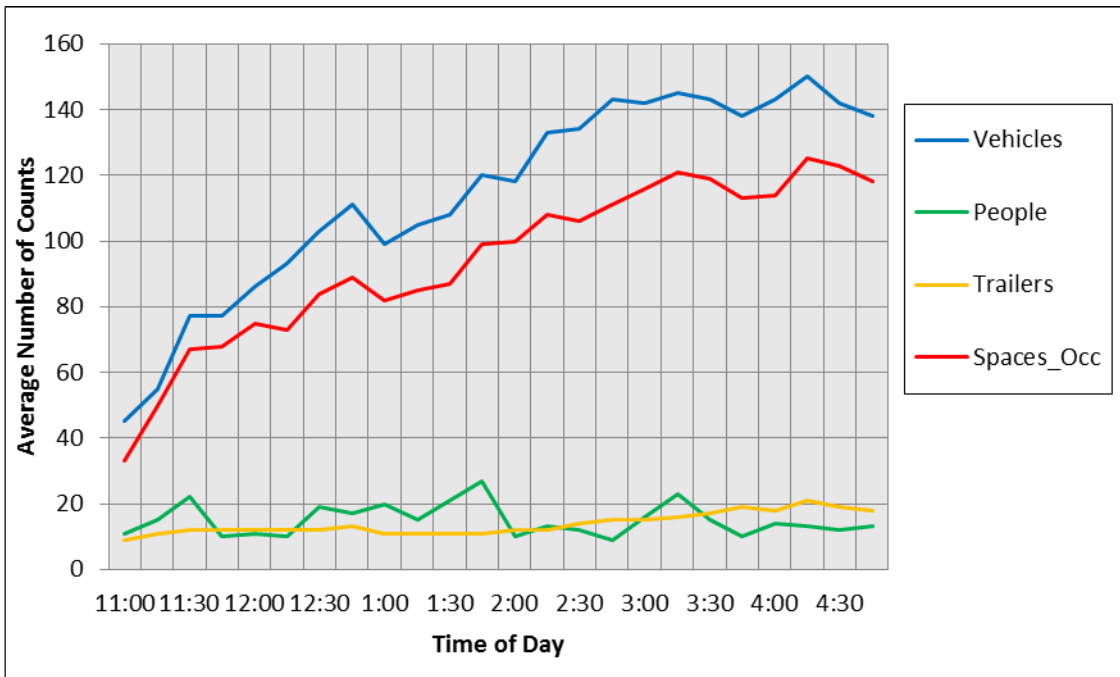
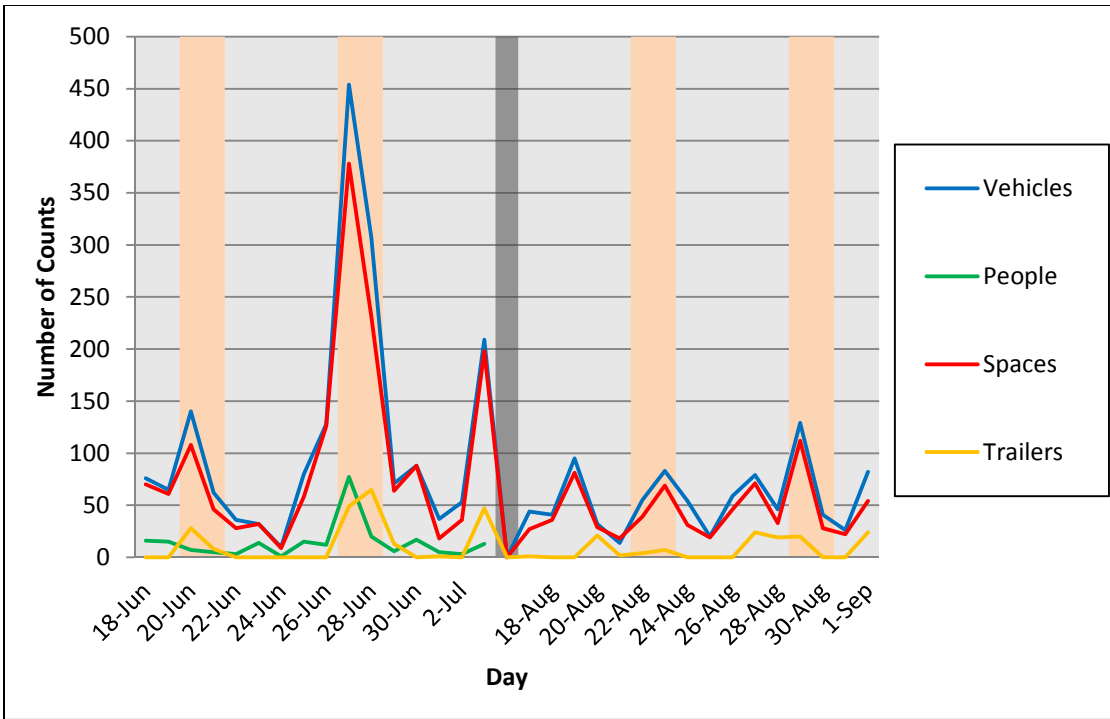


Frenchman Coulee Recreation Area (Boat Launch)

Site Name: **Frenchman Coulee Recreation Area**

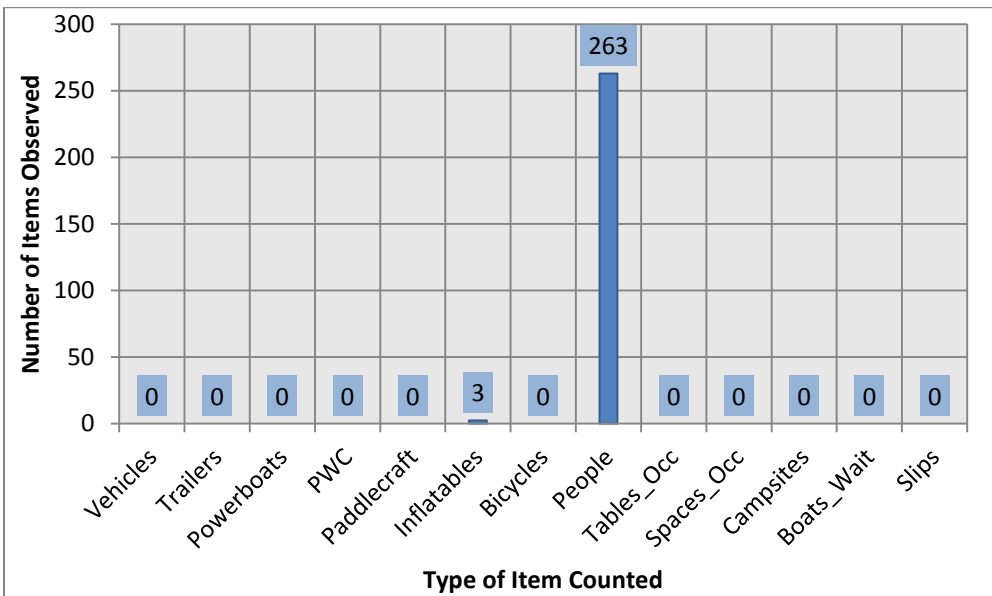
Amenities: **Boat Launch**
Picnic Area (Not shown in photo)

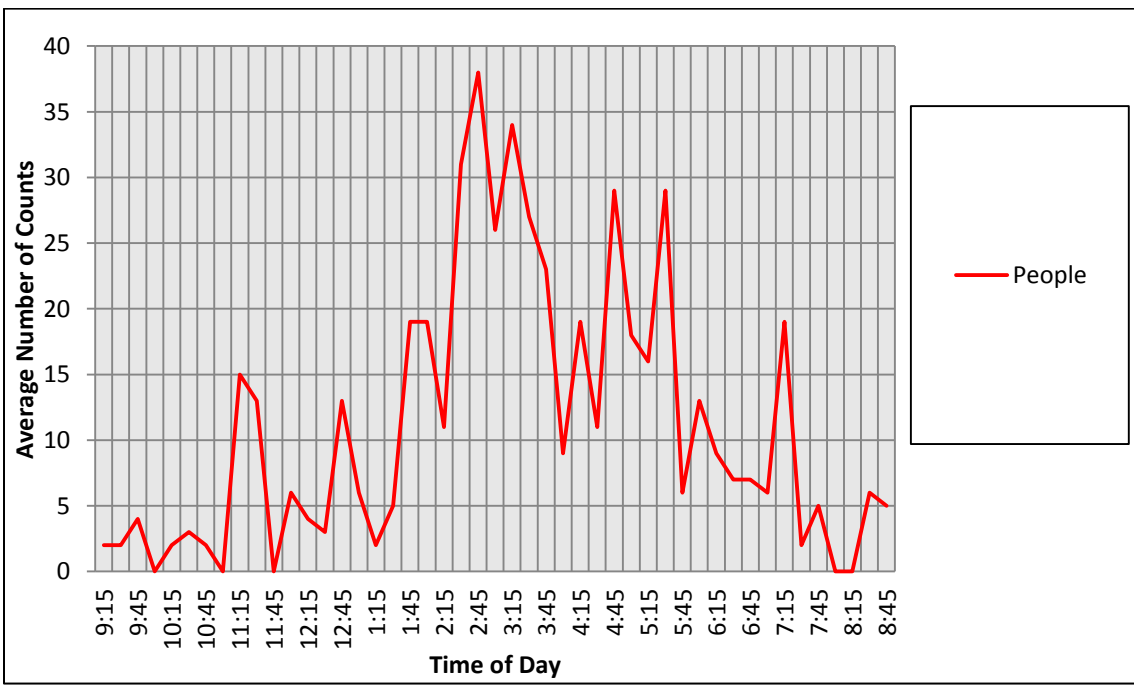
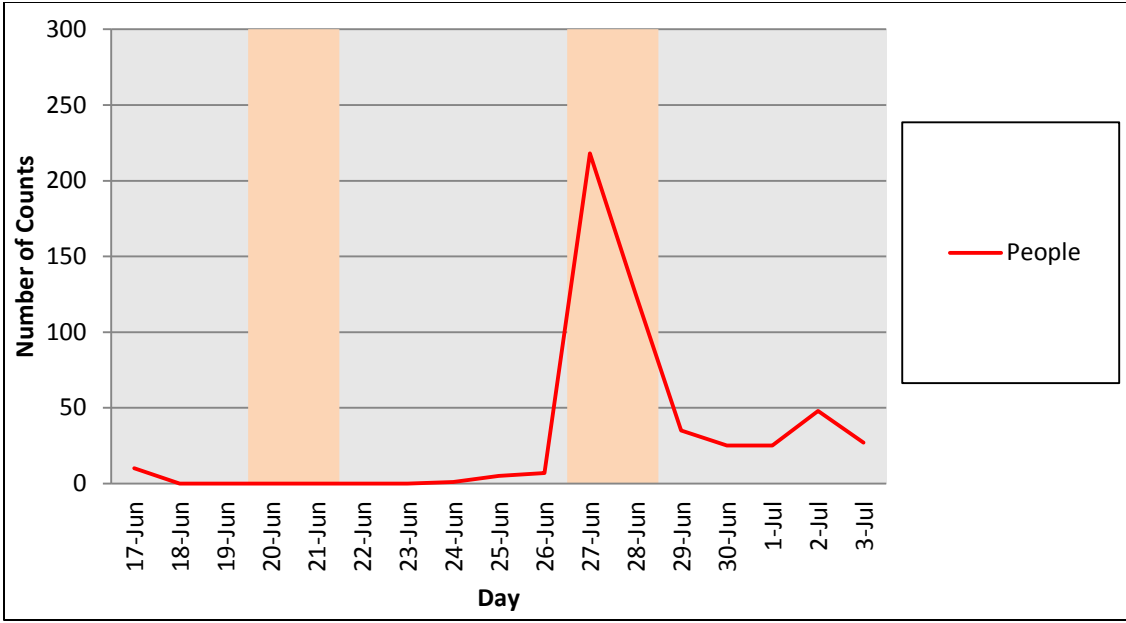




Frenchman Coulee Recreation Area (Trail)

Site Name: **Frenchman Coulee Recreation Area** Amenities: **Trail (entire area in foreground)**

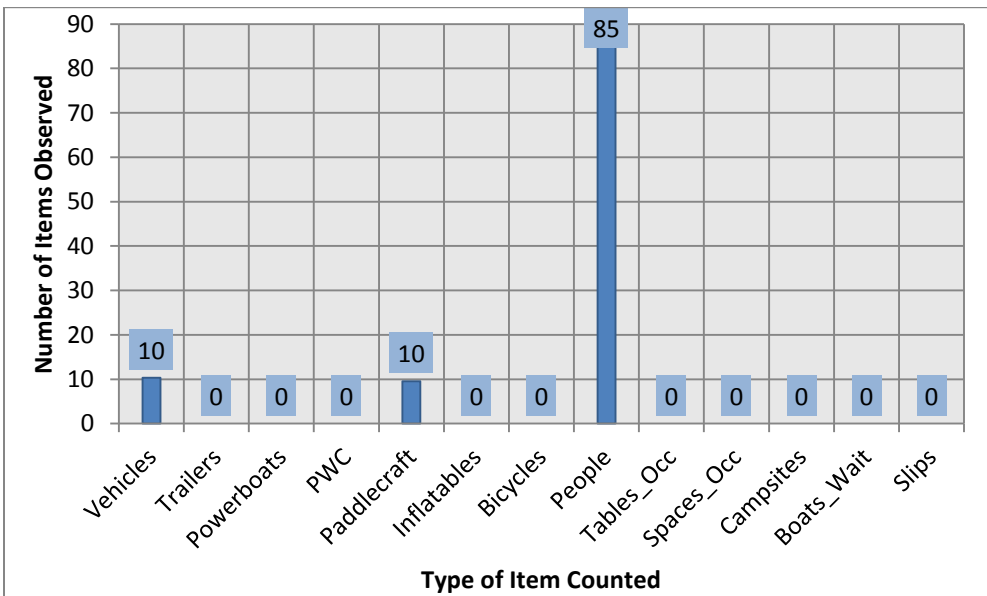


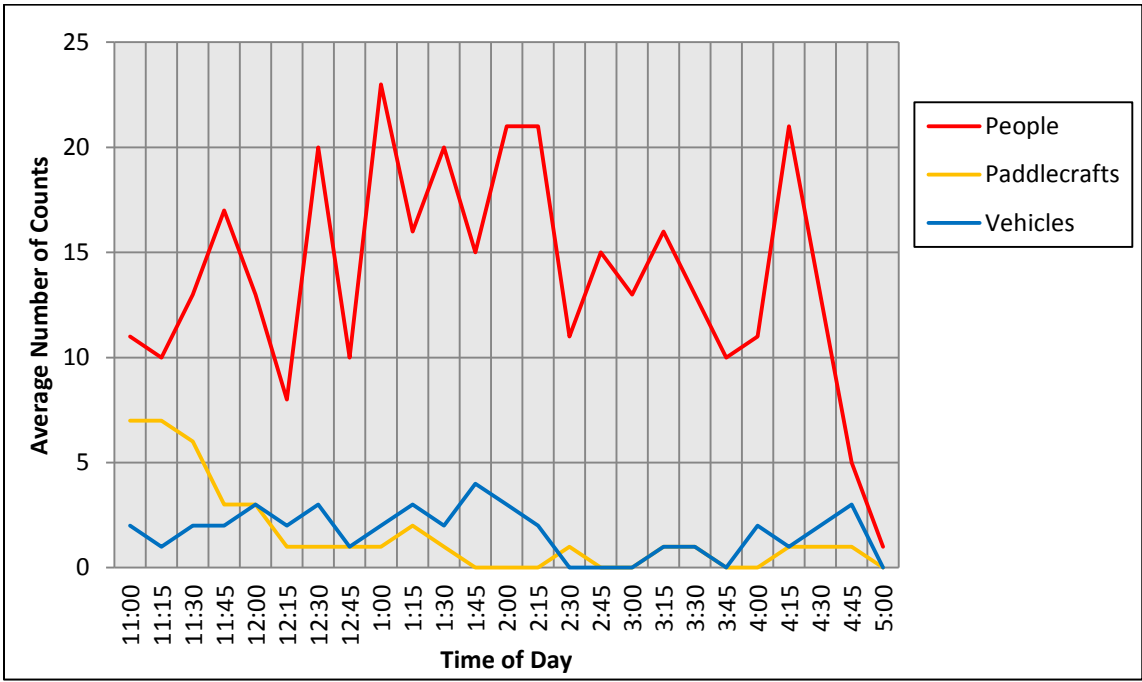
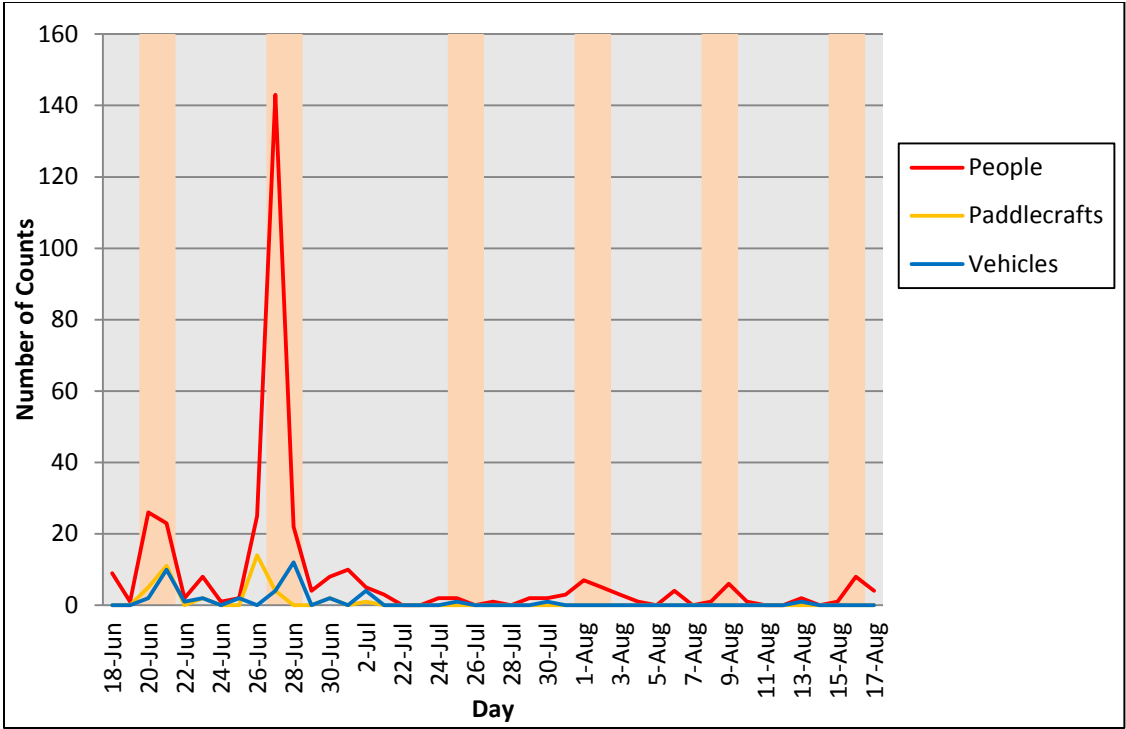


Rocky Coulee (Boat Launch)

Site Name: **Rocky Coulee**

Amenities: **Boat Launch**

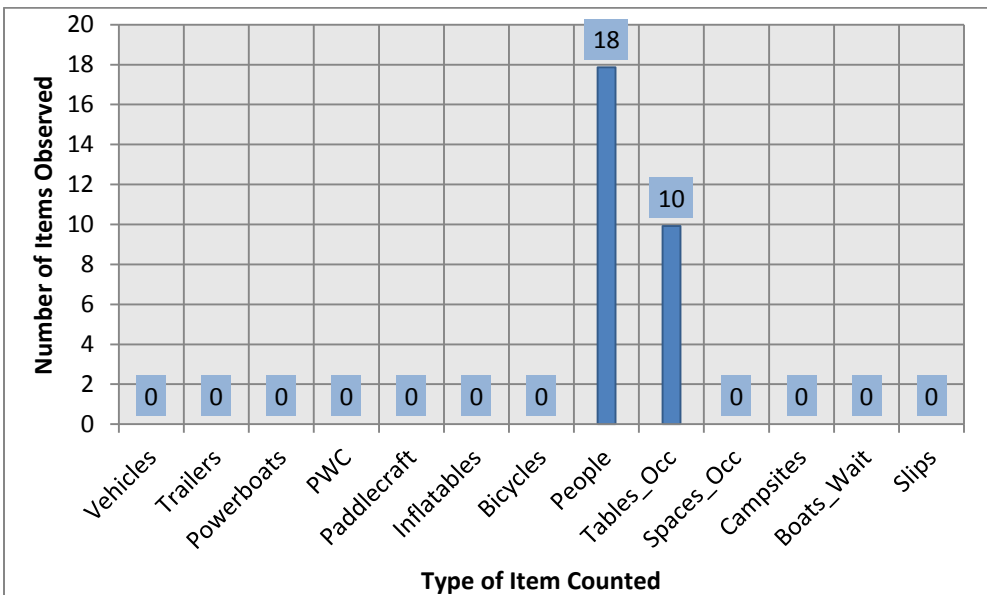


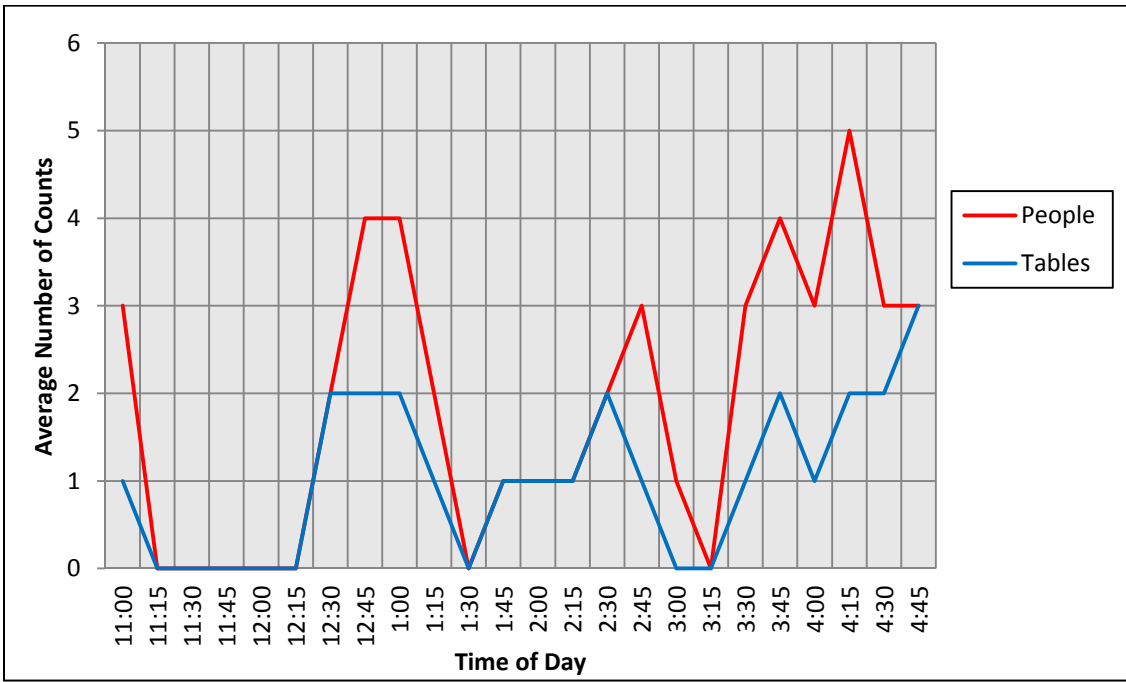
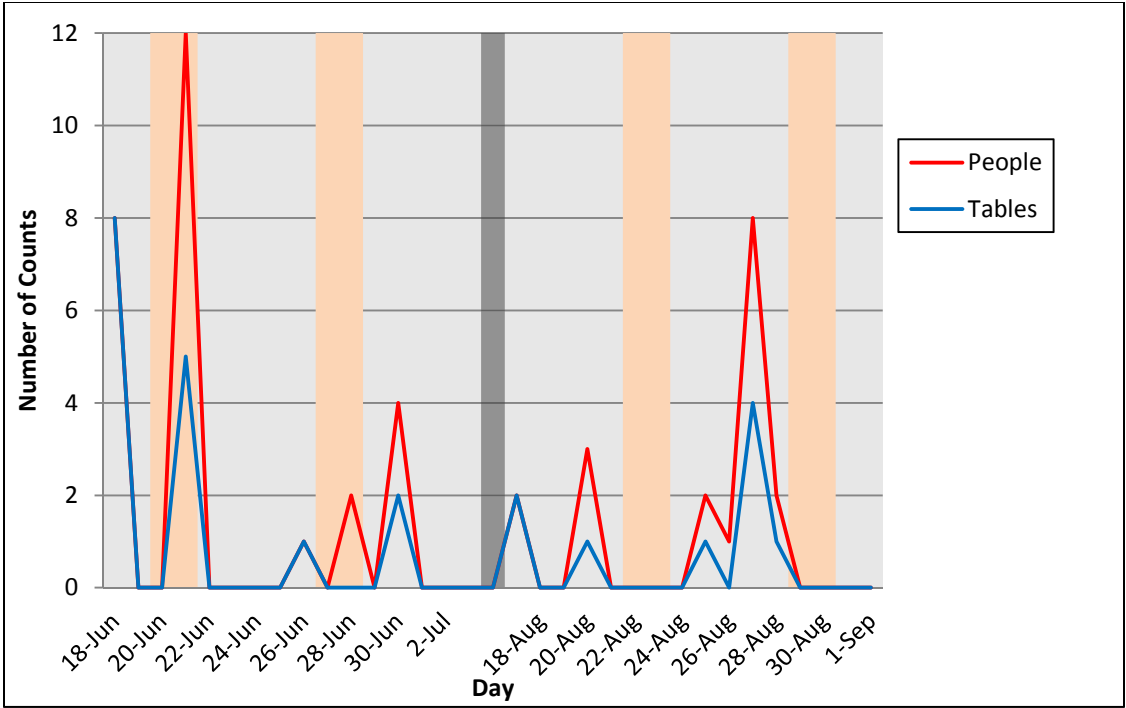


Rocky Coulee (Picnic Area)

Site Name: **Rocky Coulee**

Amenities: **Picnic Area**

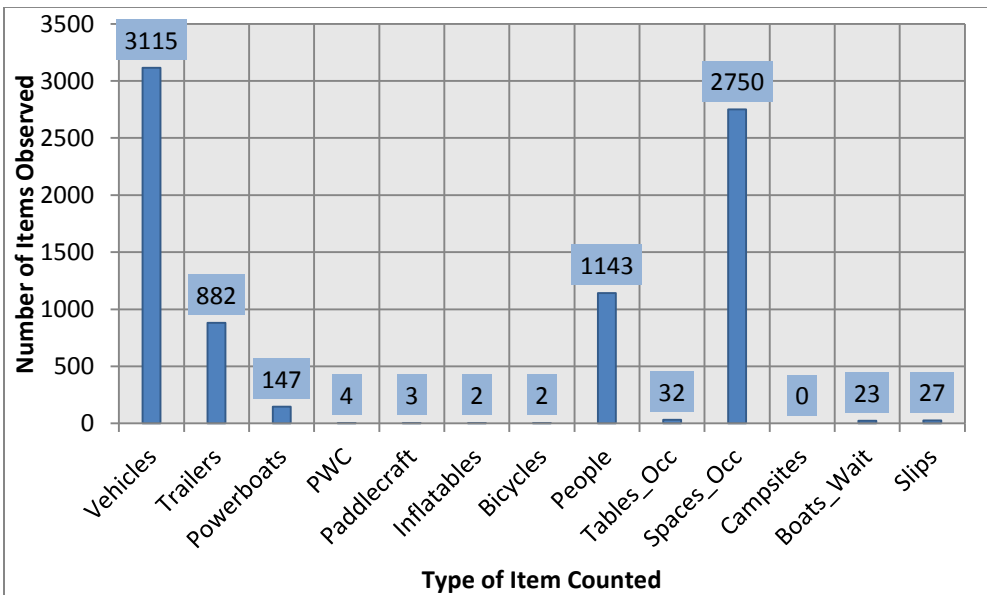


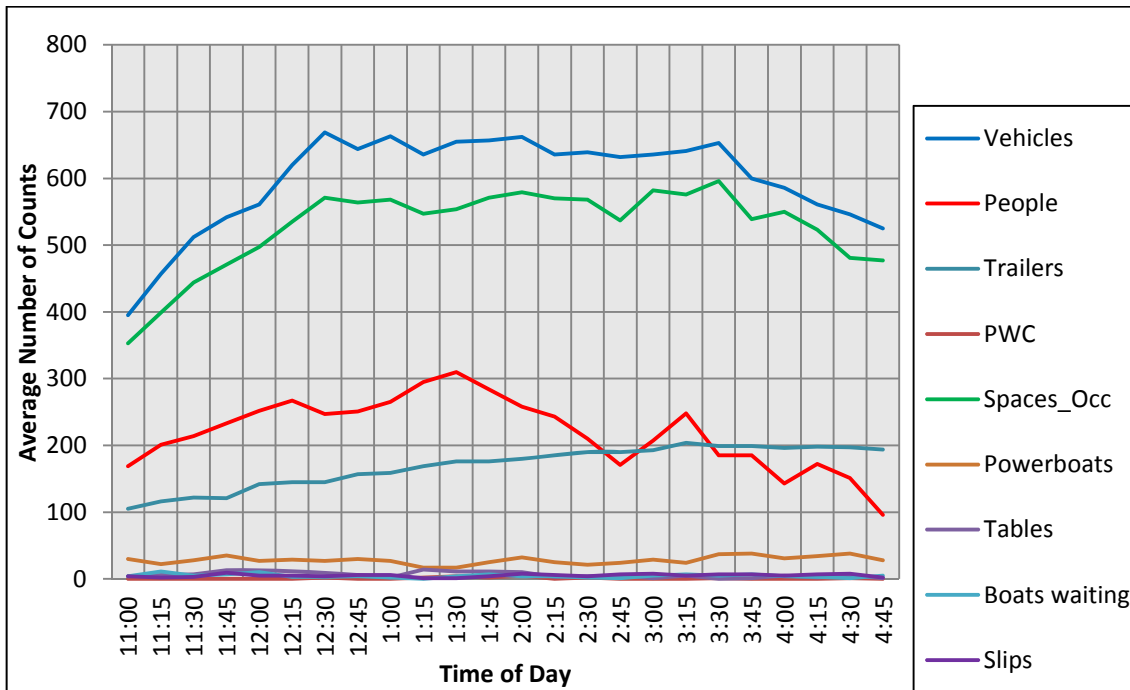
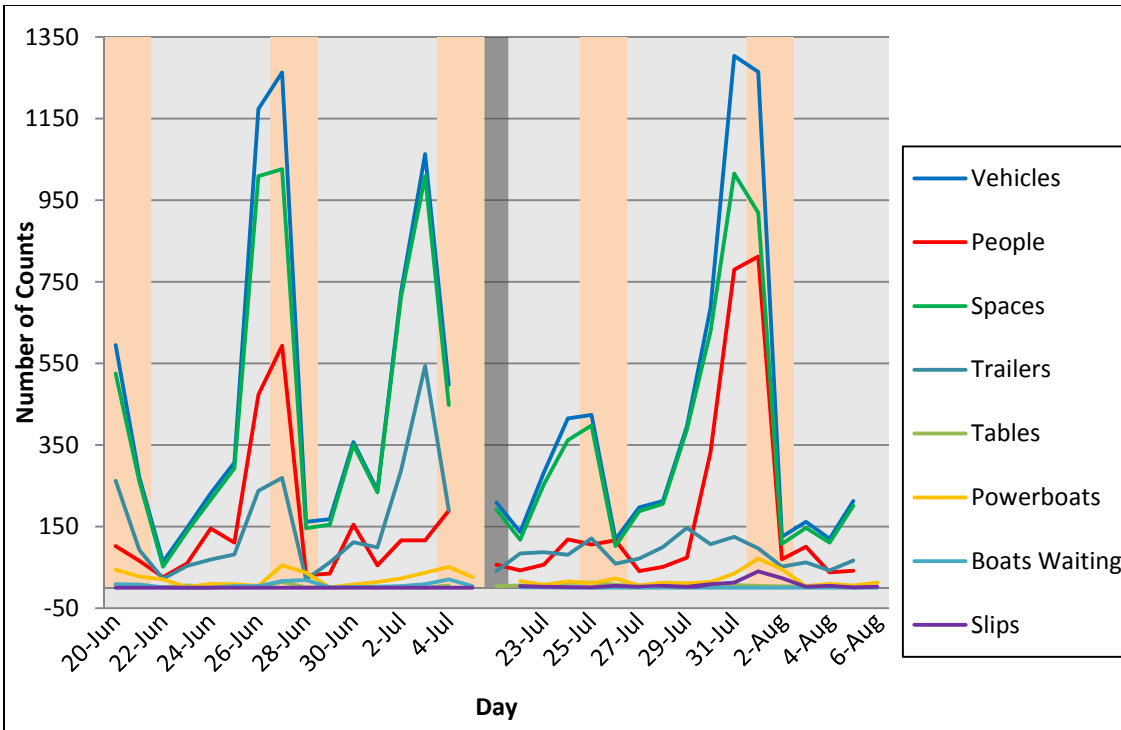


Vantage Boat Launch

Site Name: **Vantage Boat Launch**

Amenities: **Boat Launch (excludes marked picnic areas)**
Picnic Area

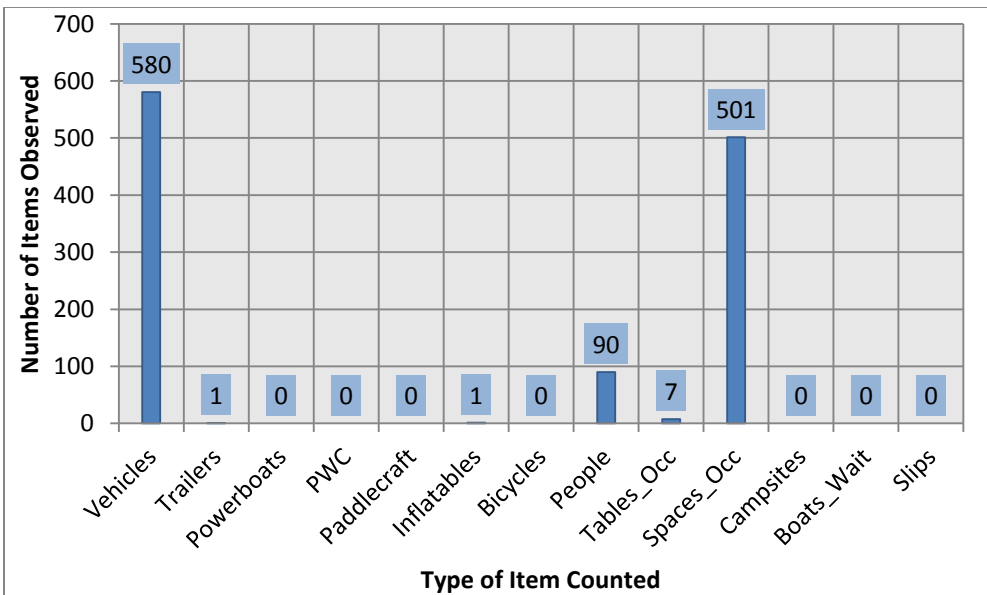


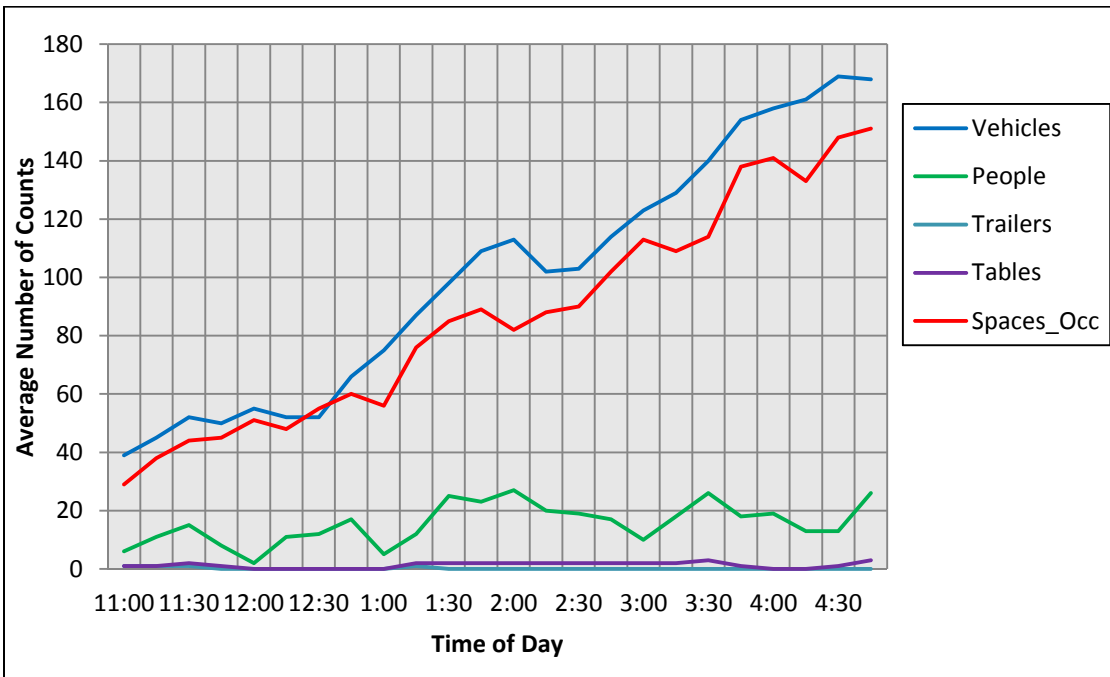
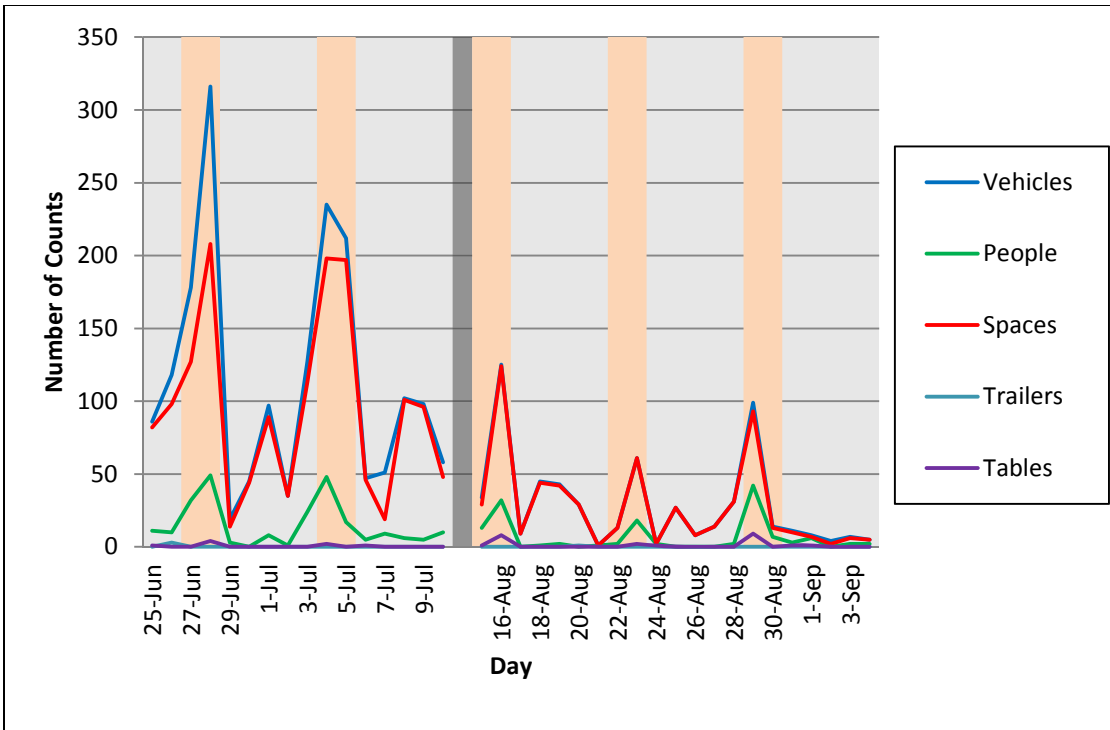


Sand Hollow (Picnic Area – Camera 1)

Site Name: **Sand Hollow**

Amenities: **Picnic Area**

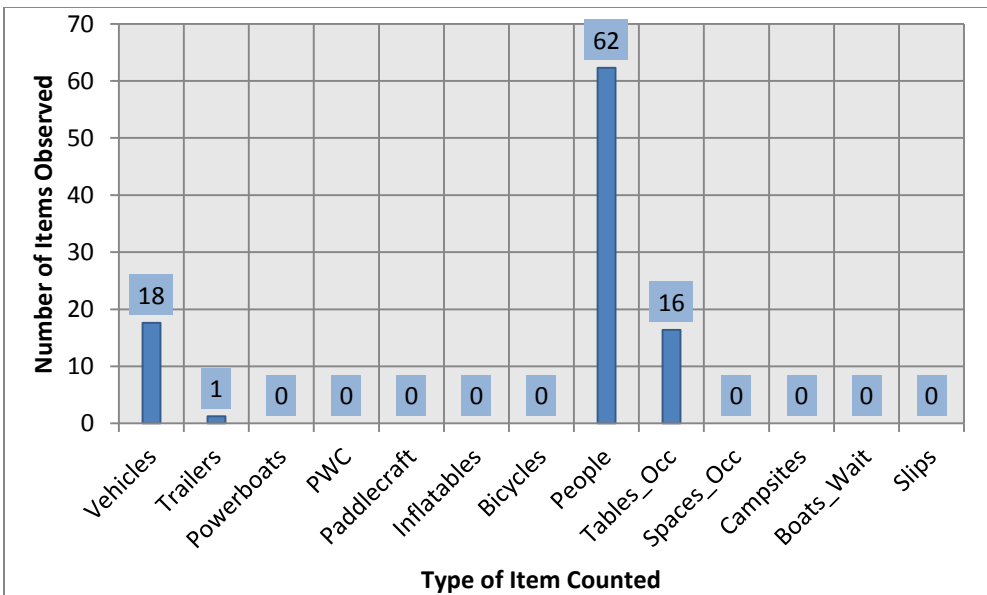


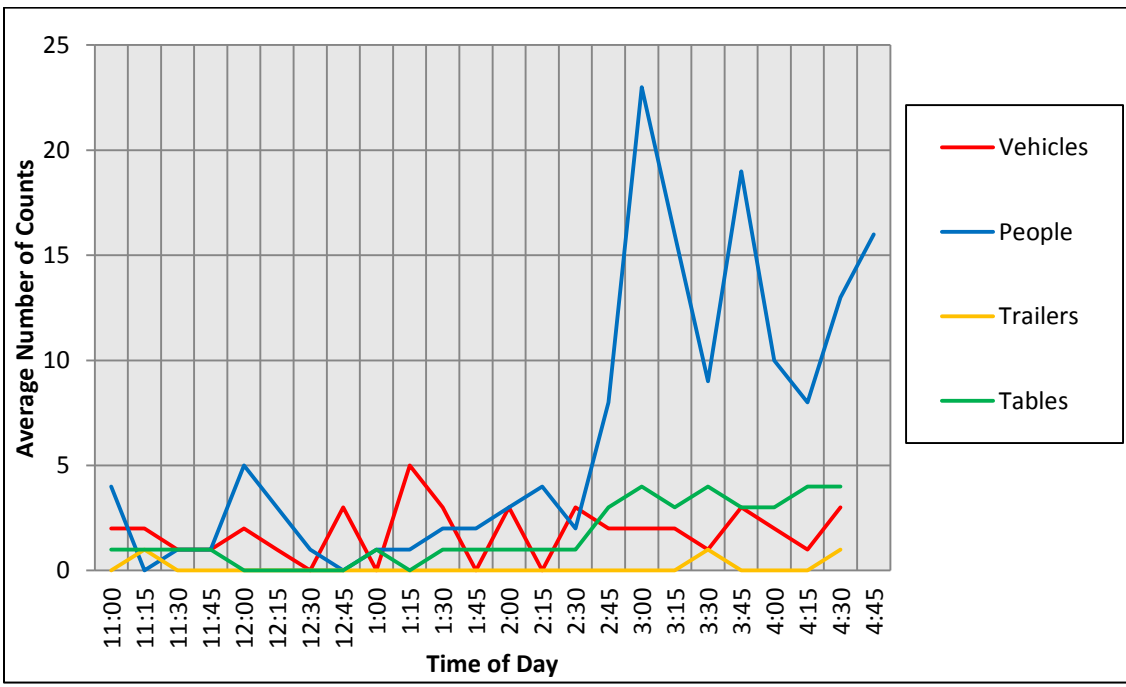
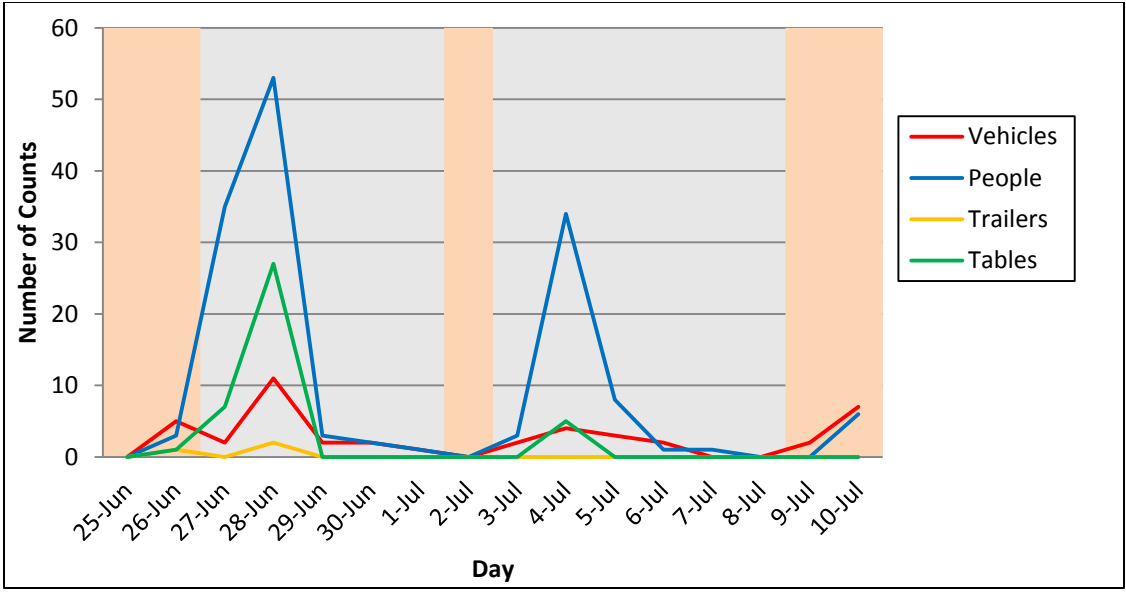


Sand Hollow (Picnic Area – Camera 2)

Site Name: Sand Hollow

Amenities: Picnic Area

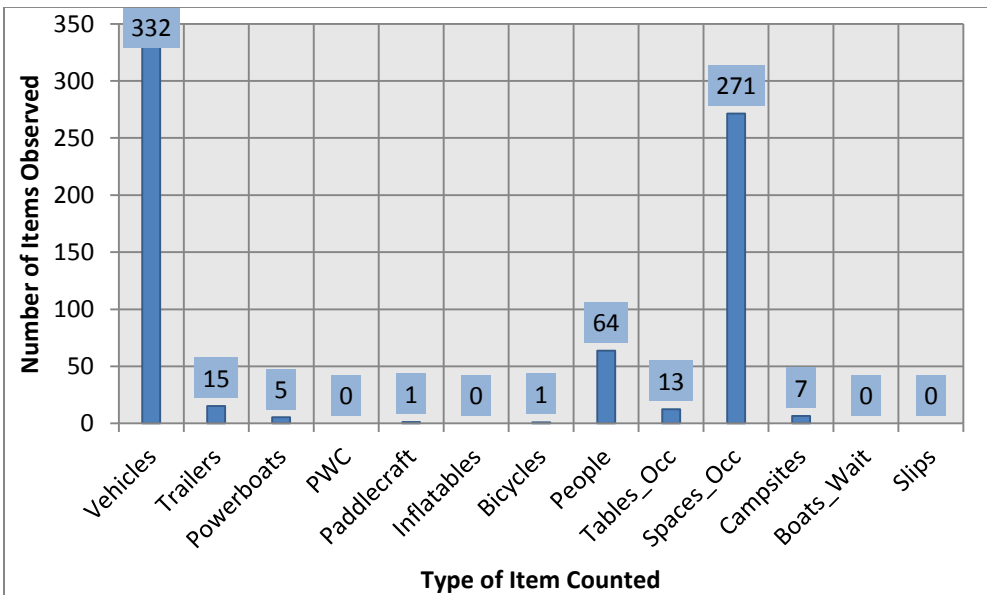


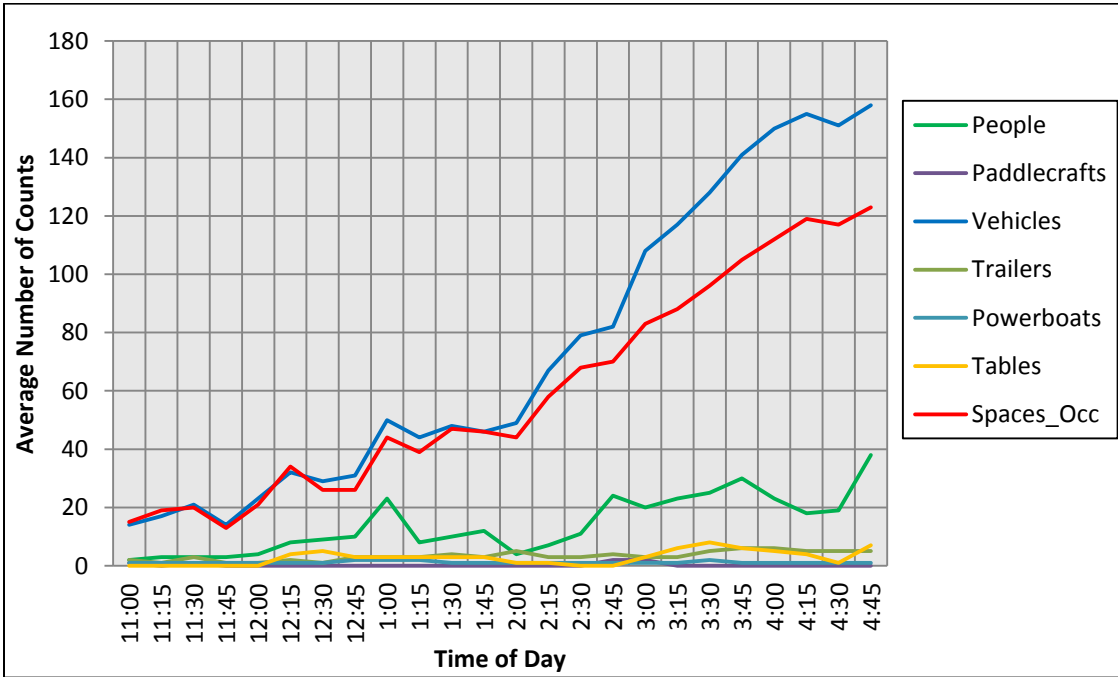
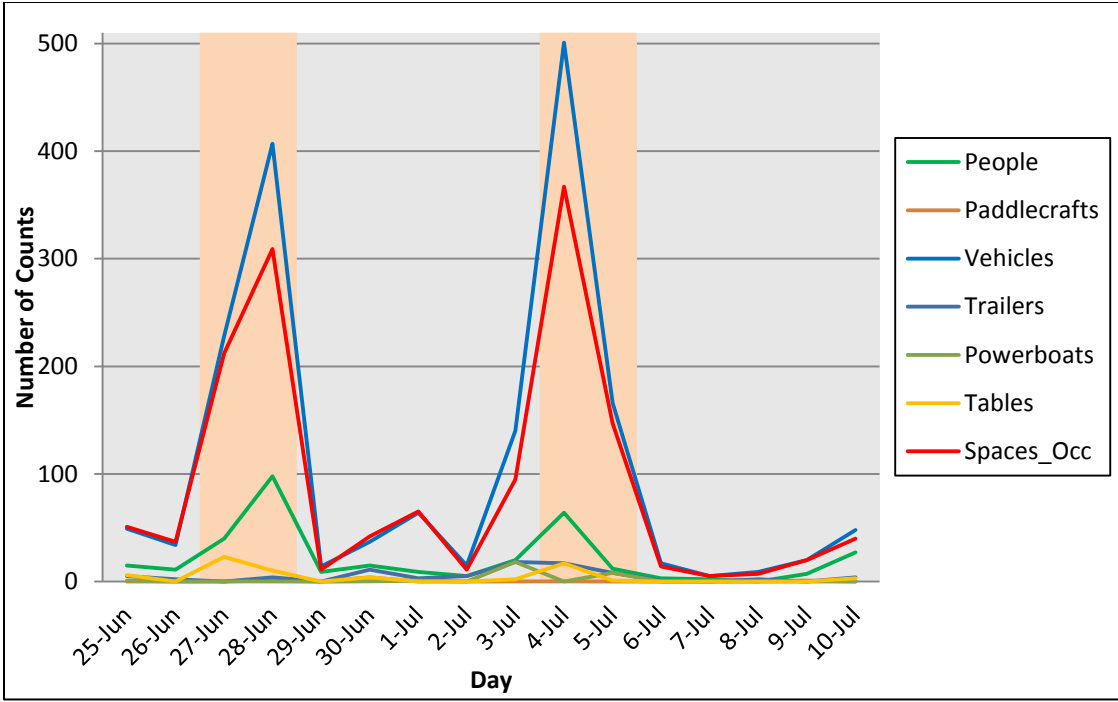


Sand Hollow (Picnic Area – Camera 3)

Site Name: Sand Hollow

Amenities: Picnic Area

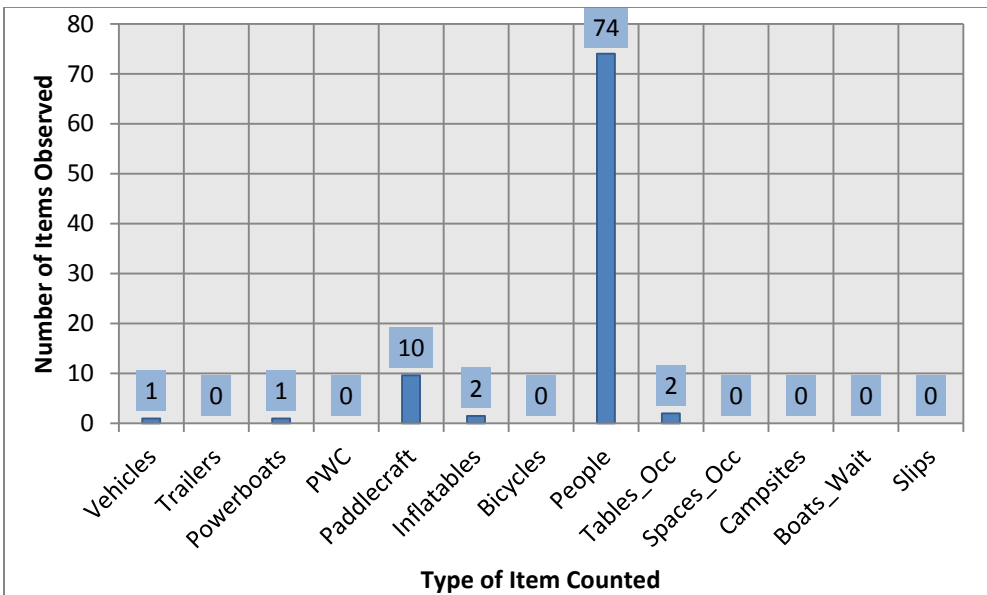
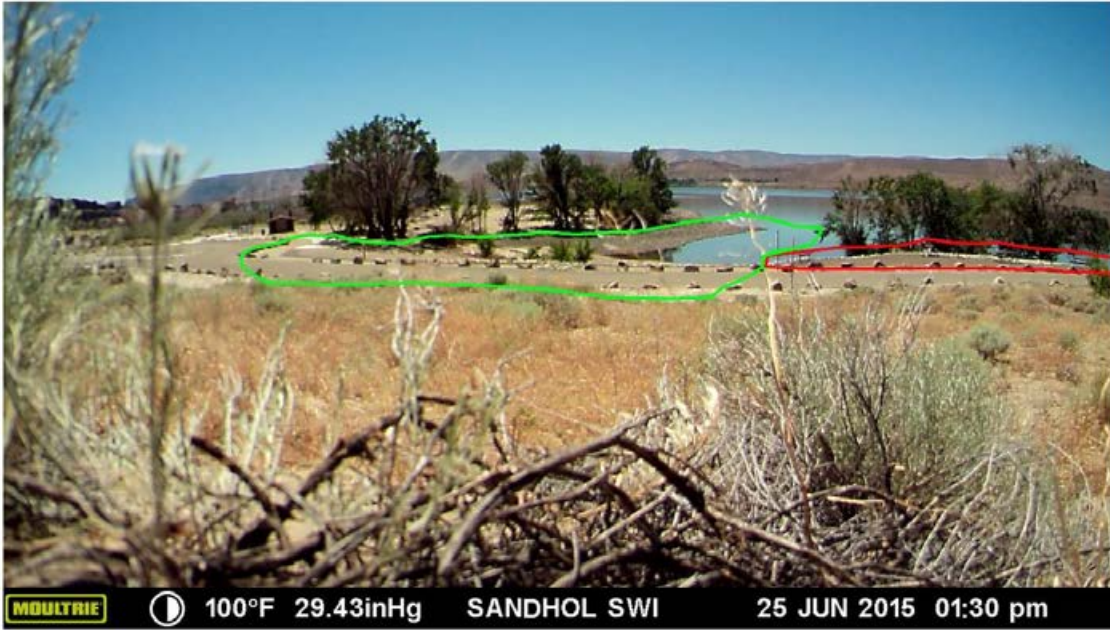


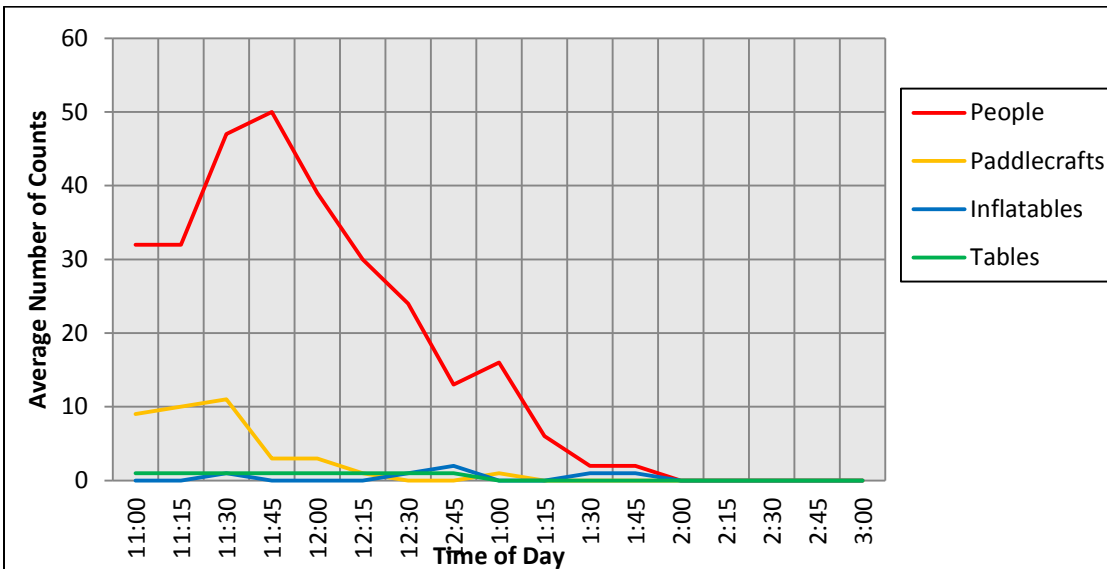
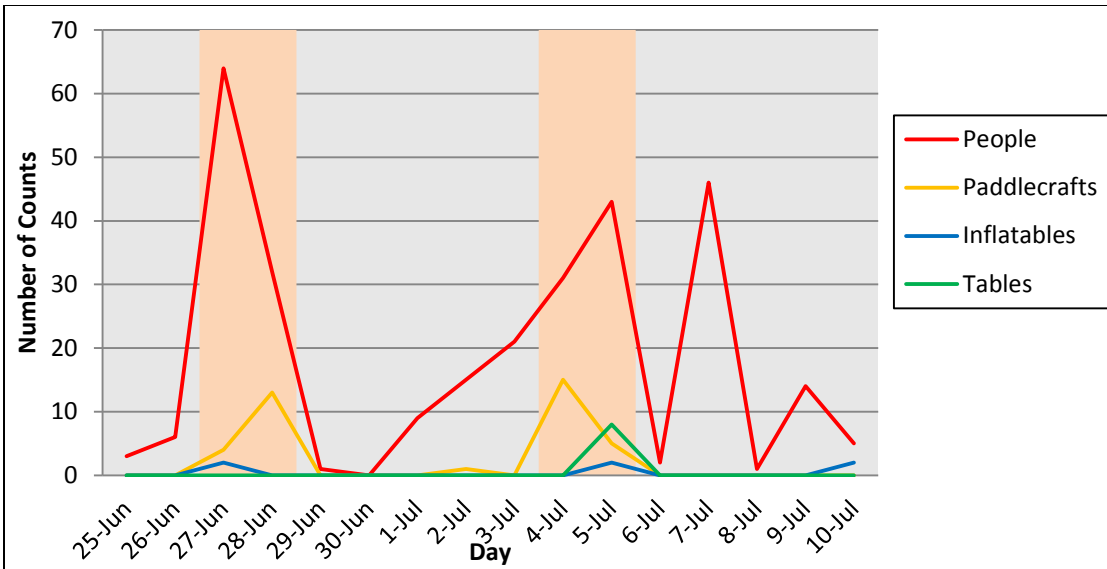


Sand Hollow (Swim Area)

Site Name: **Sand Hollow**

Amenities: **Picnic Area**
Swim Area

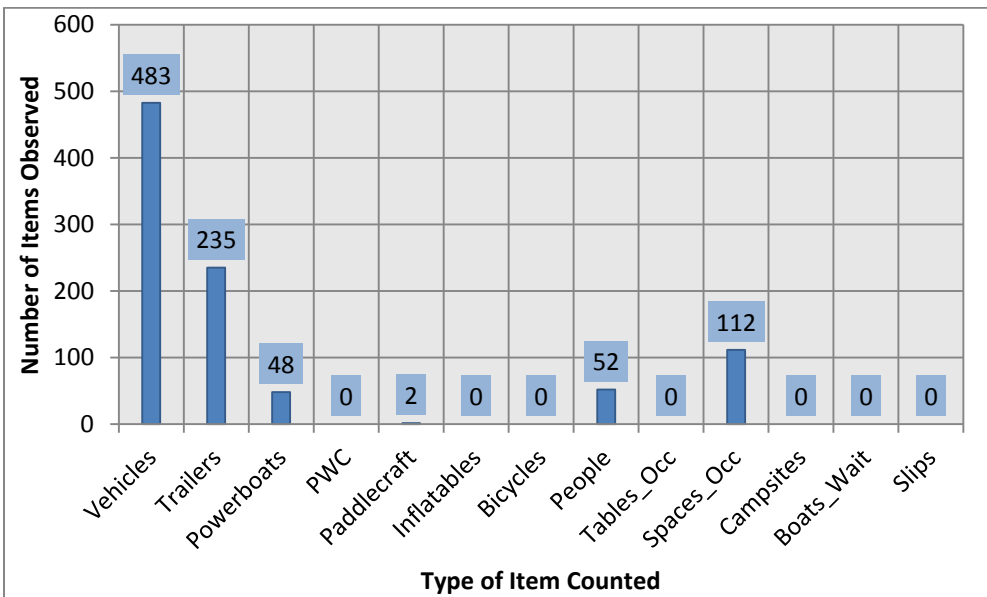
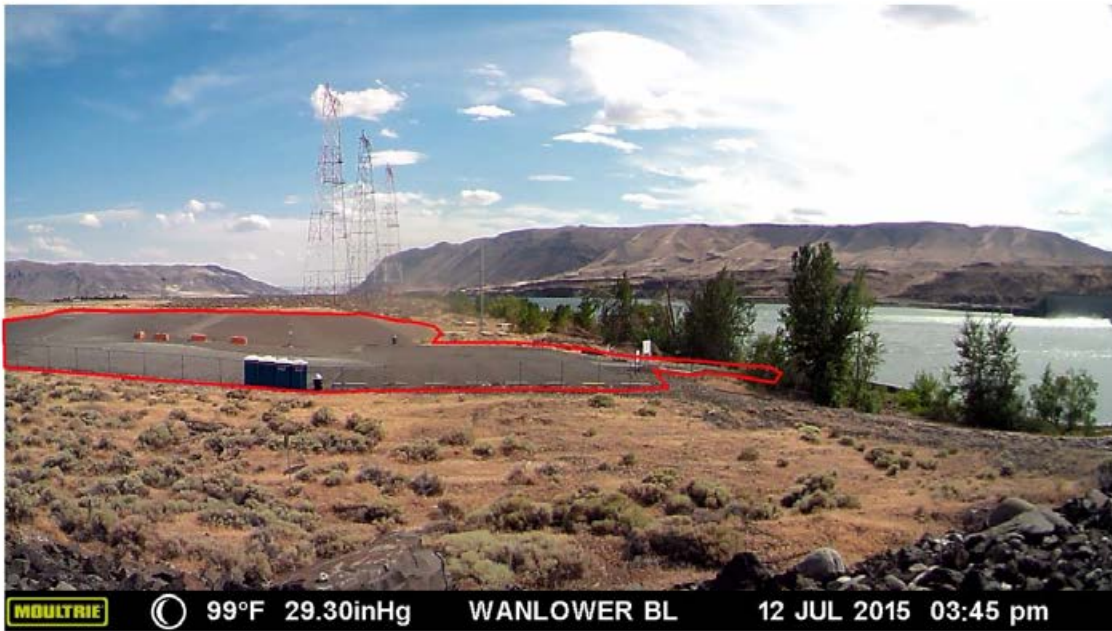


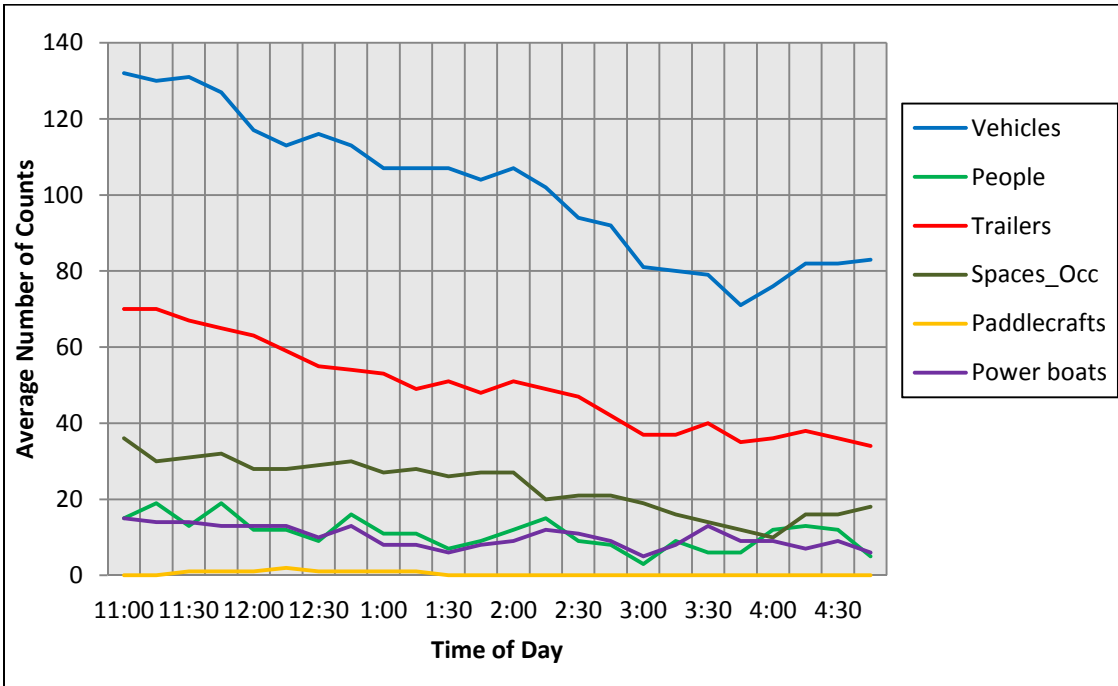
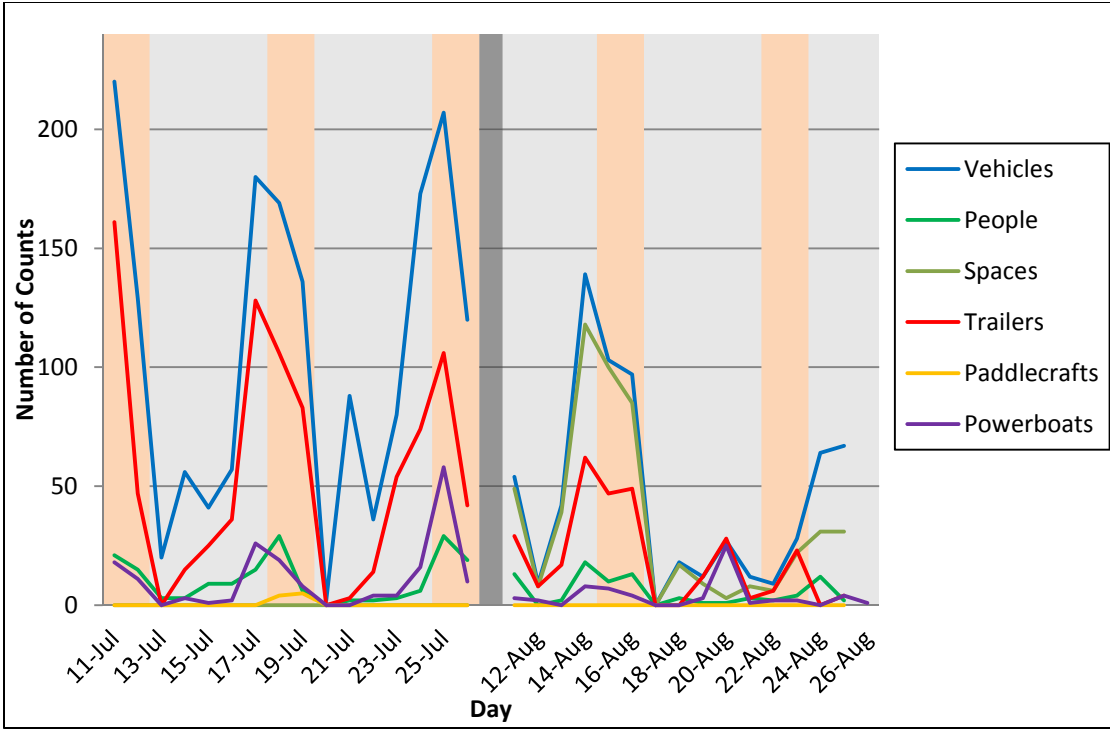


Wanapum Dam Lower Boat Launch

Site Name: **Wanapum Dam Lower Boat Launch**

Amenities: **Boat Launch**

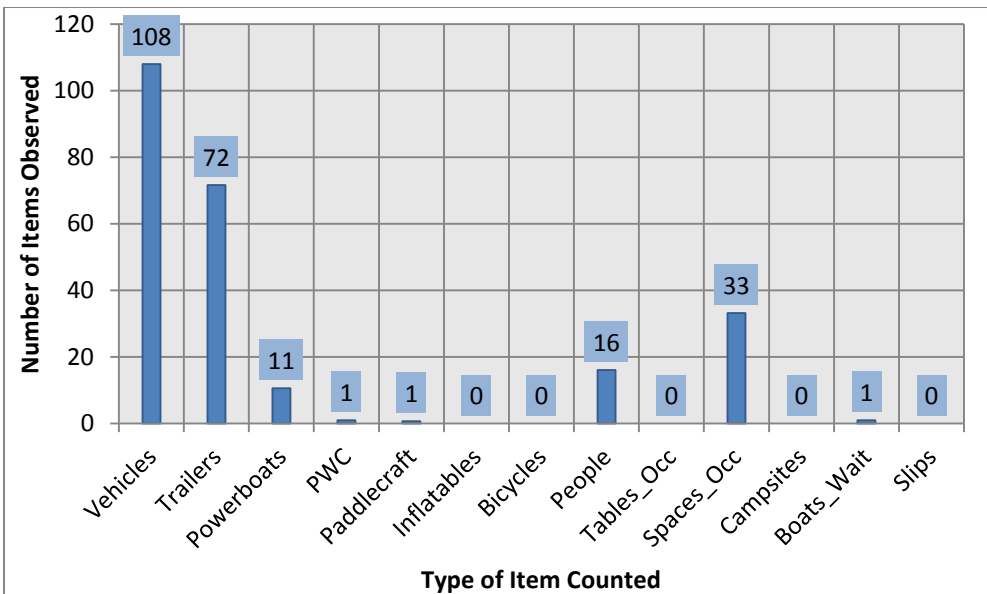


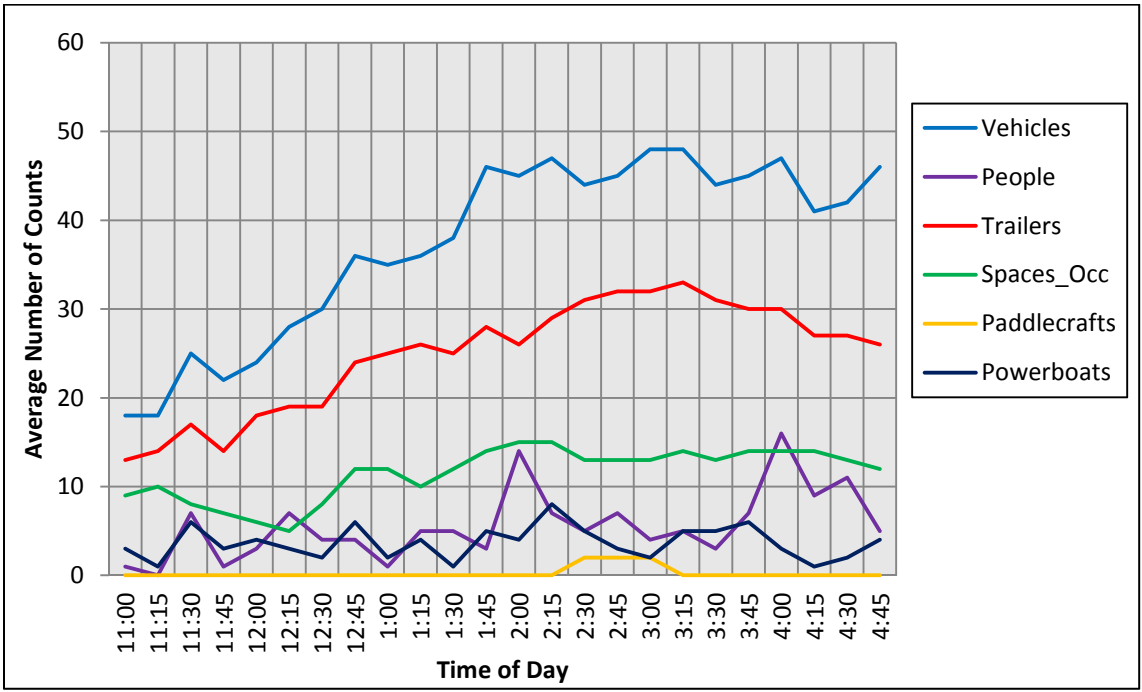
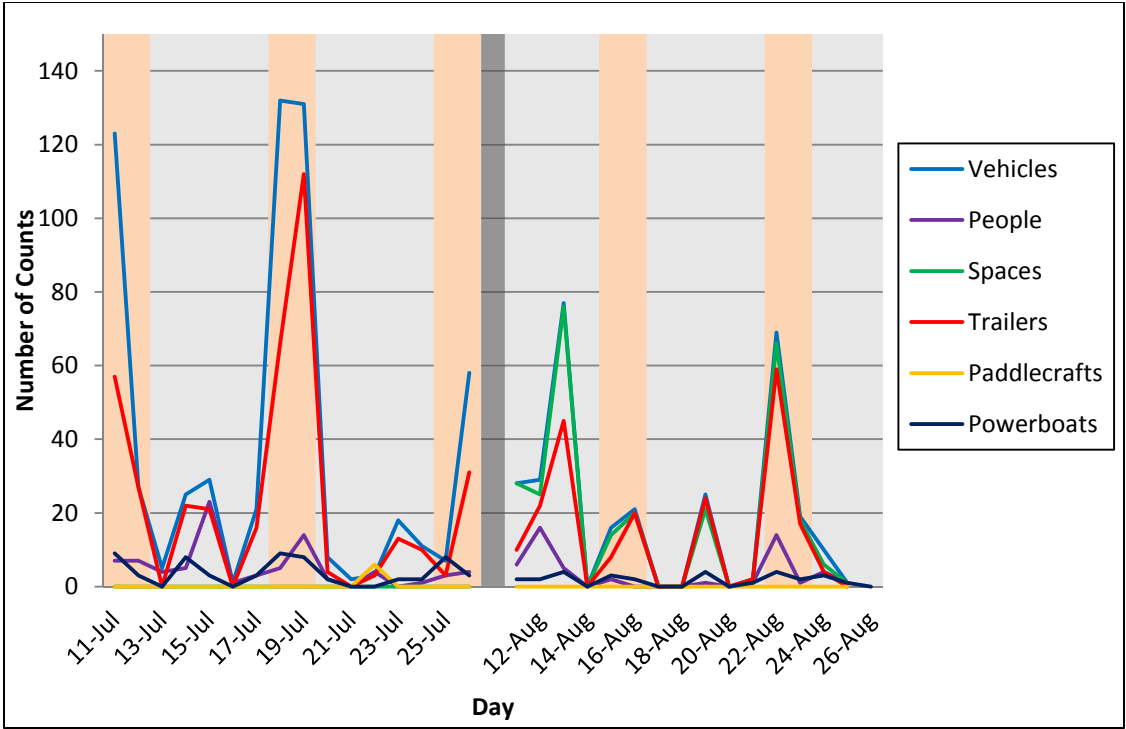


Wanapum Dam Upper Boat Launch

Site Name: **Wanapum Dam Upper Boat Launch**

Amenities: **Boat Launch**

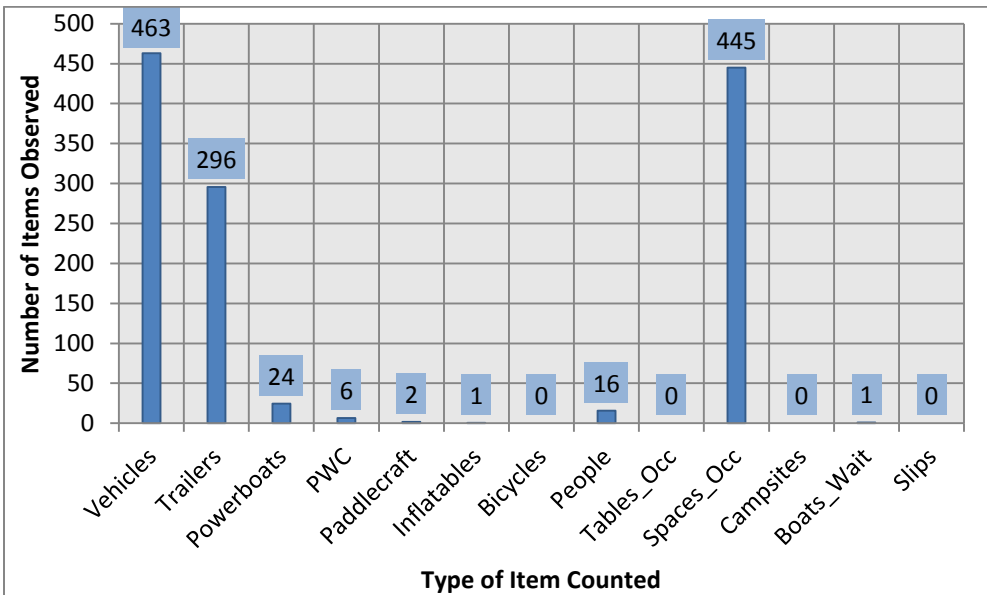


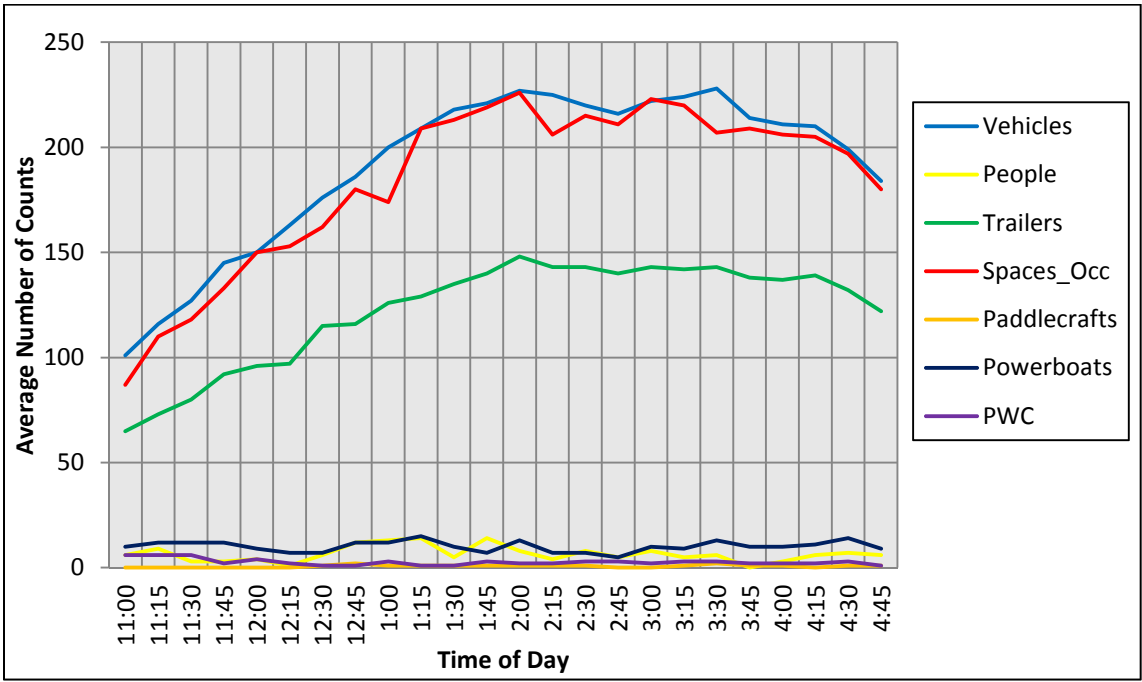
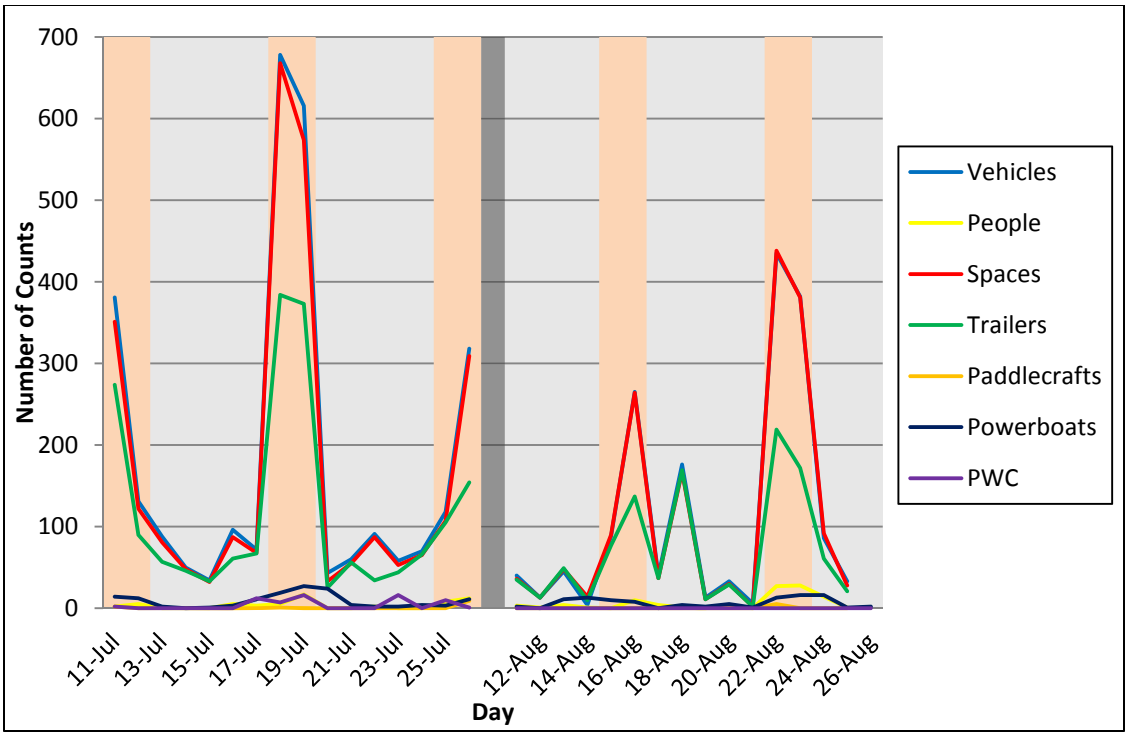


Wanapum Recreation Area (Boat Launch)

Site Name: **Wanapum Recreation Area (WSP)**

Amenities: **Boat Launch**

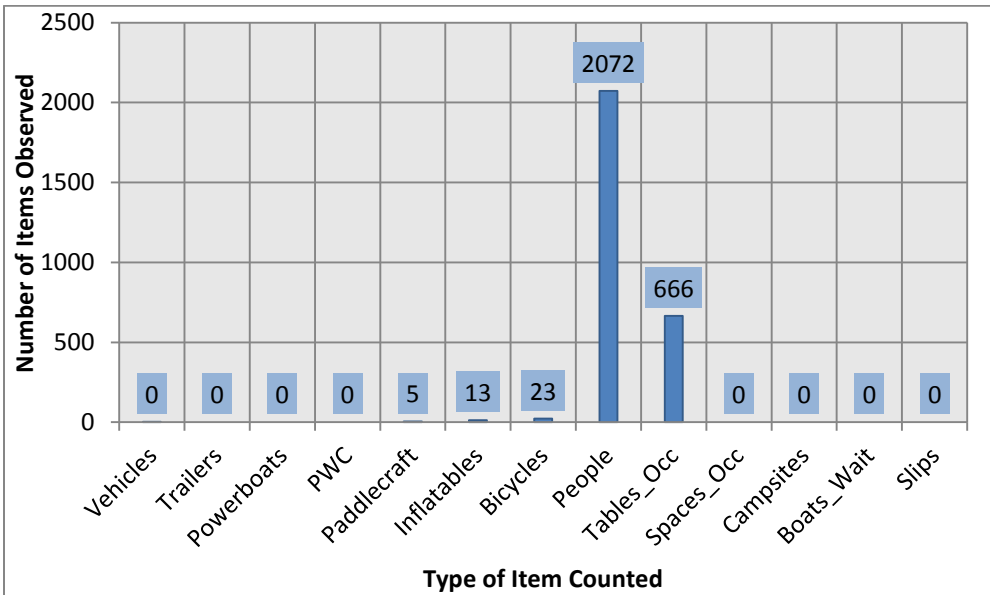


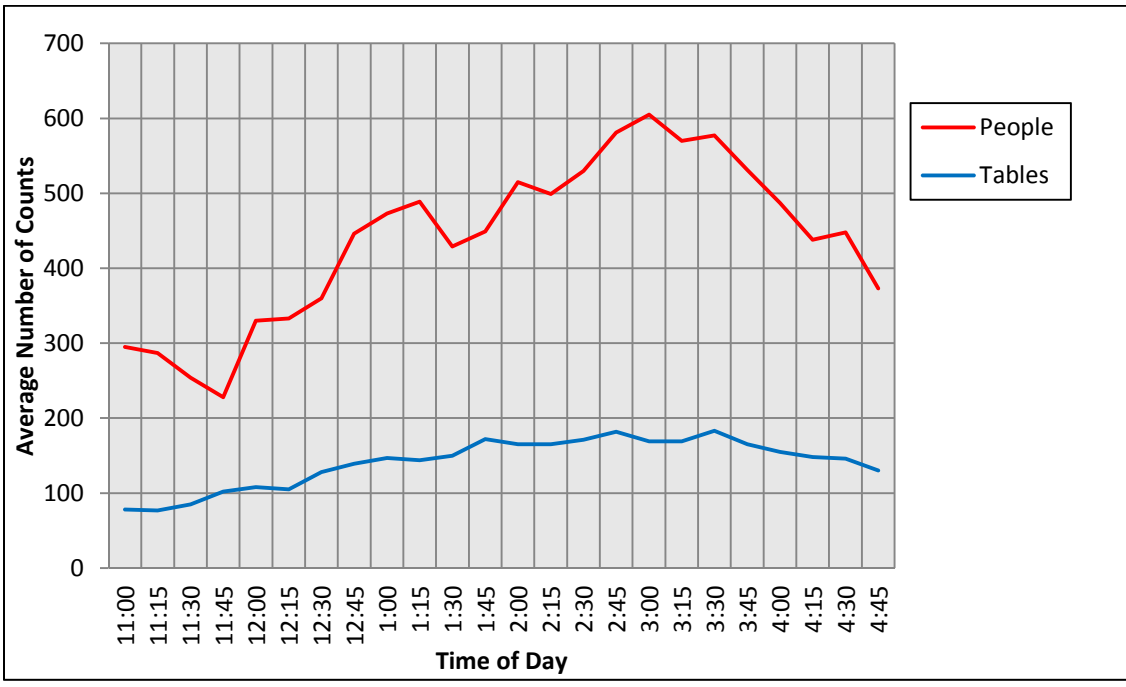
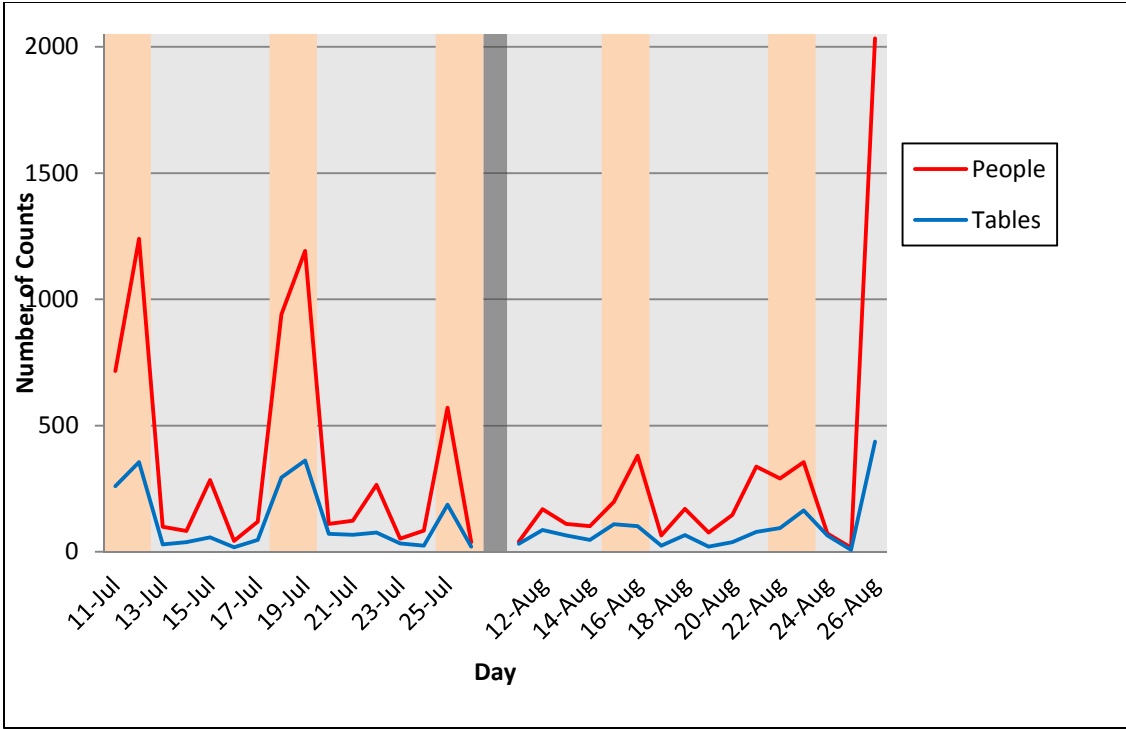


Wanapum Recreation Area (Picnic Area)

Site Name: **Wanapum Recreation Area (WSP)**

Amenities: **Picnic Area**

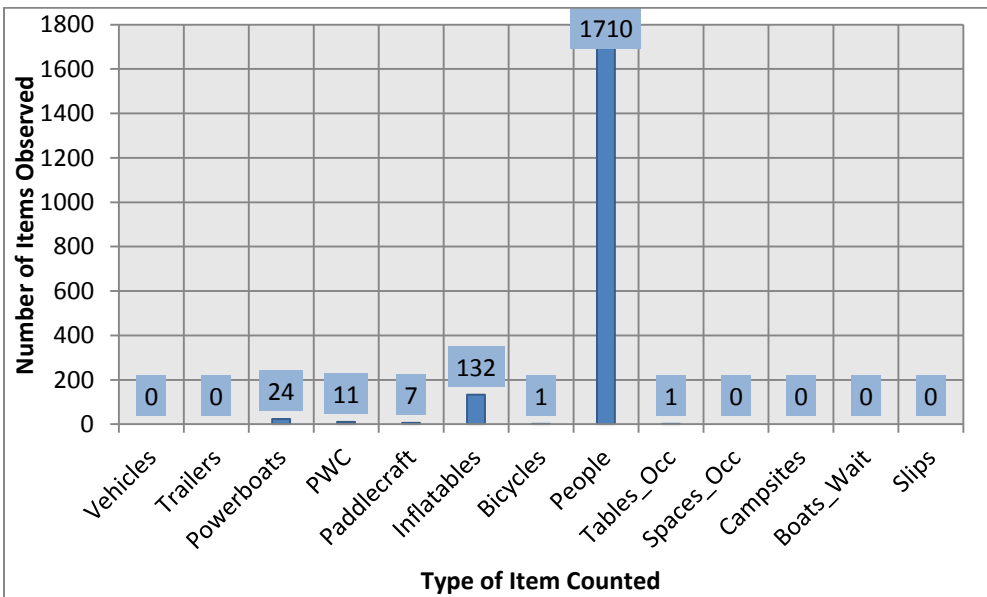
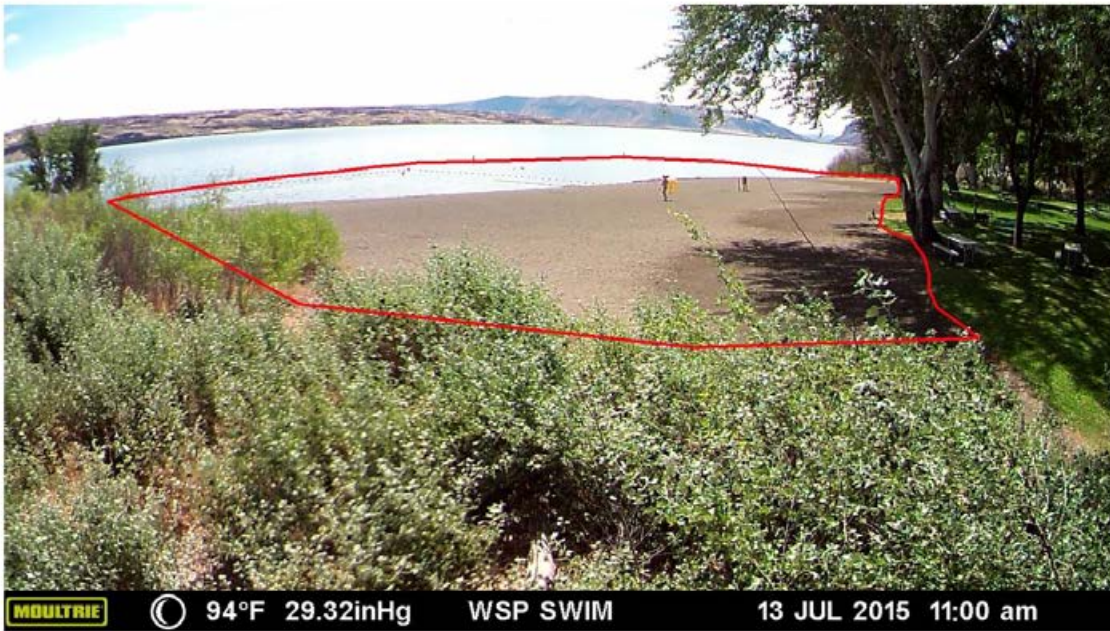


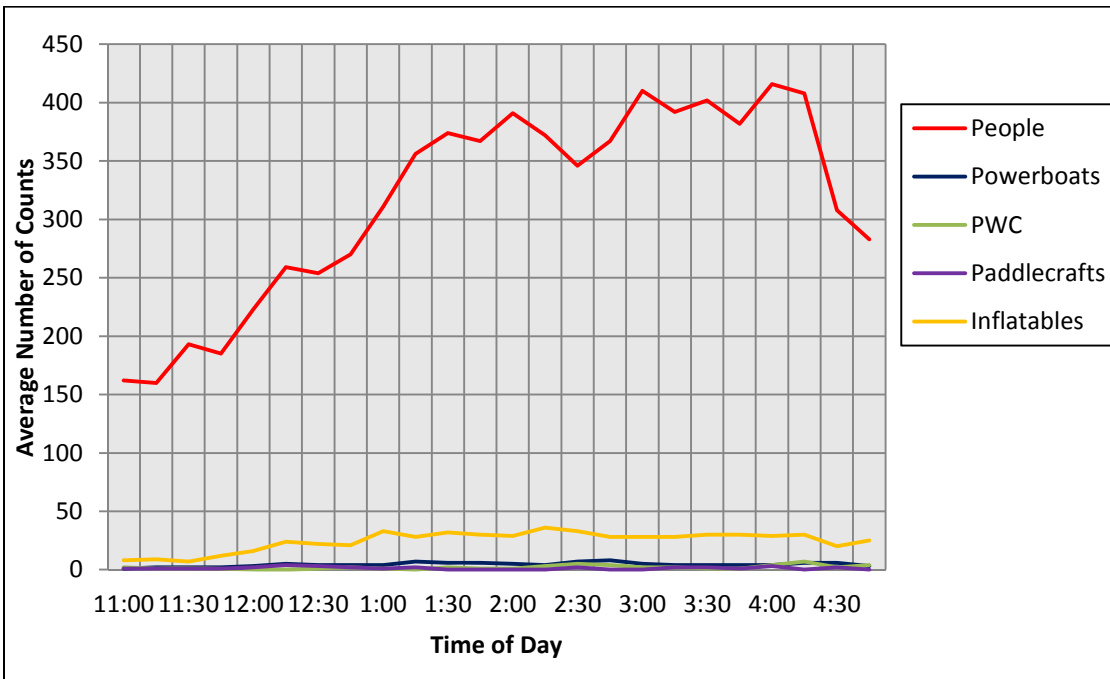
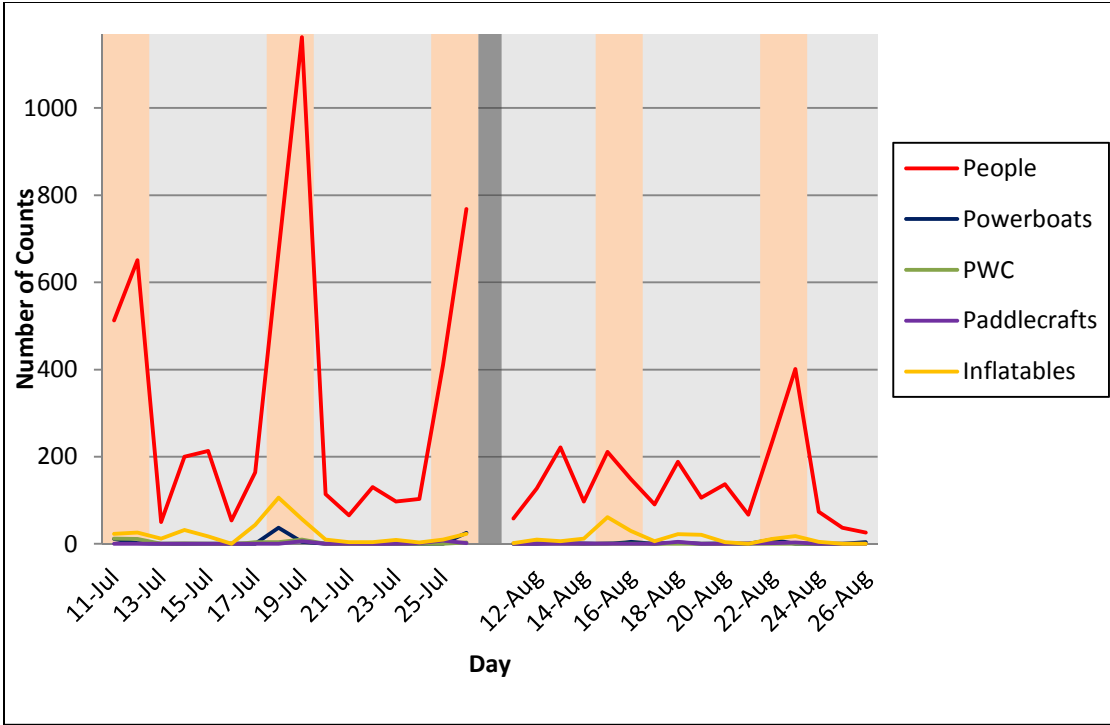


Wanapum Recreation Area (Swim Area)

Site Name: **Wanapum Recreation Area (WSP)**

Amenities: **Swim Area**

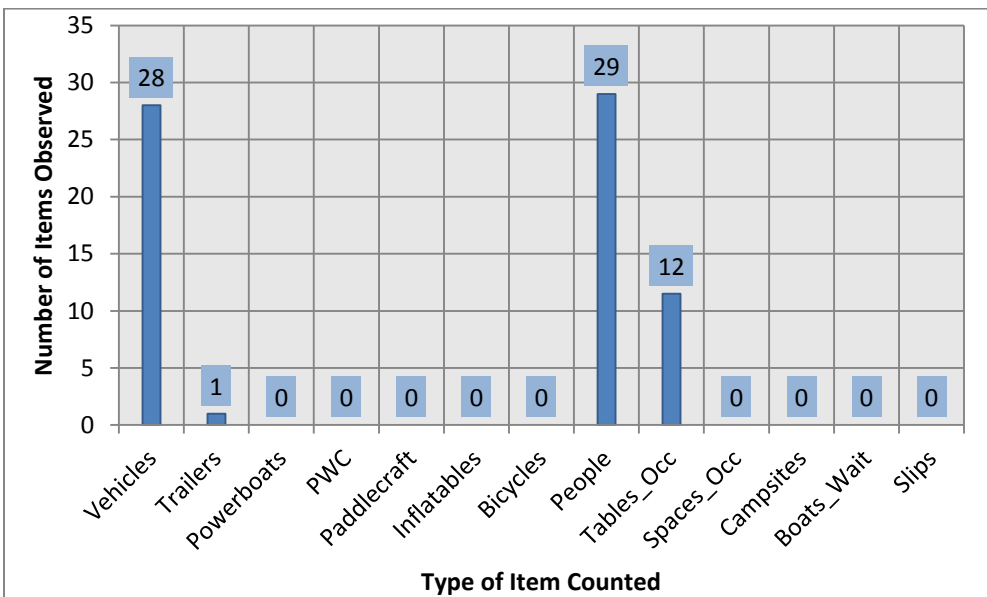


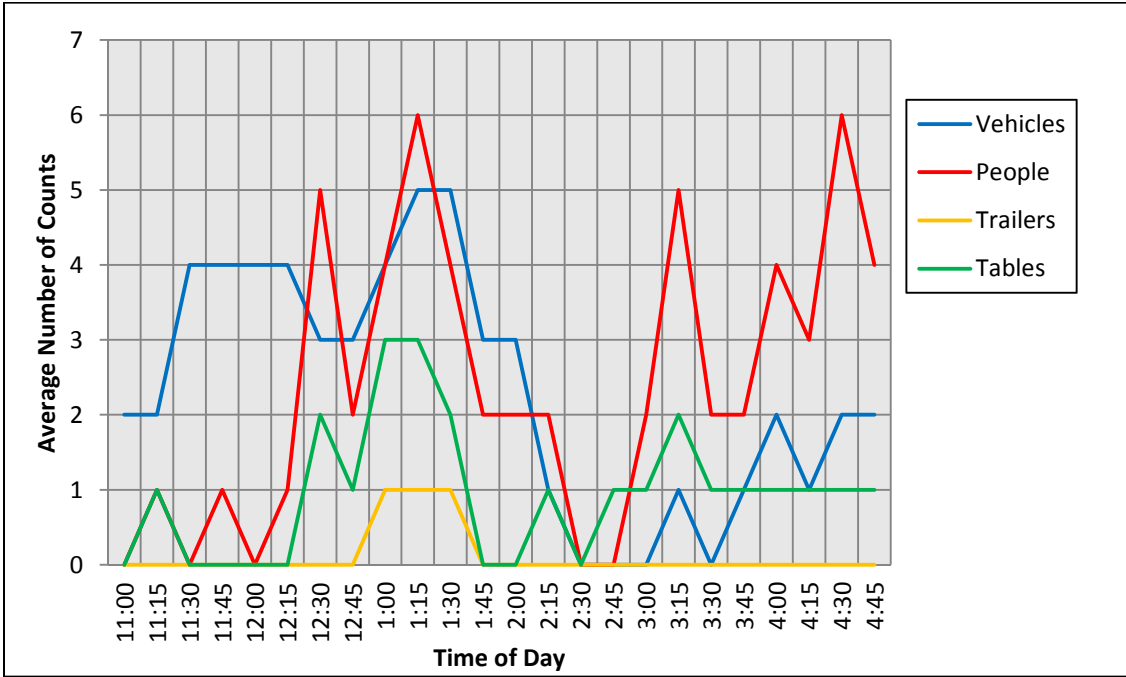
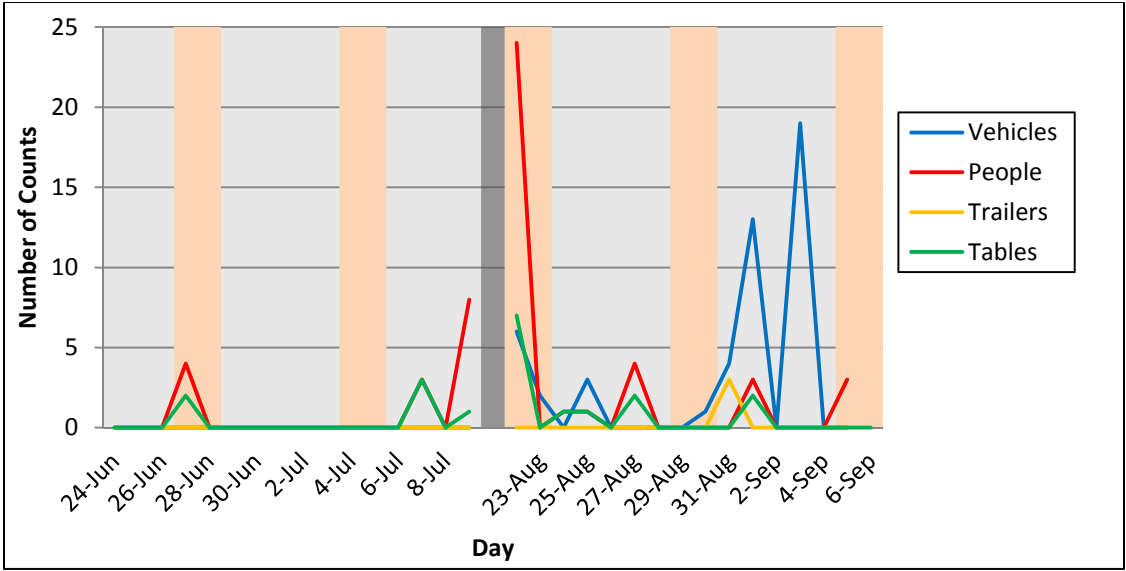


Wanapum Turbine Park (Picnic Area – Camera 1)

Site Name: **CBRA On-Is.**

Amenities: **Picnic Area**

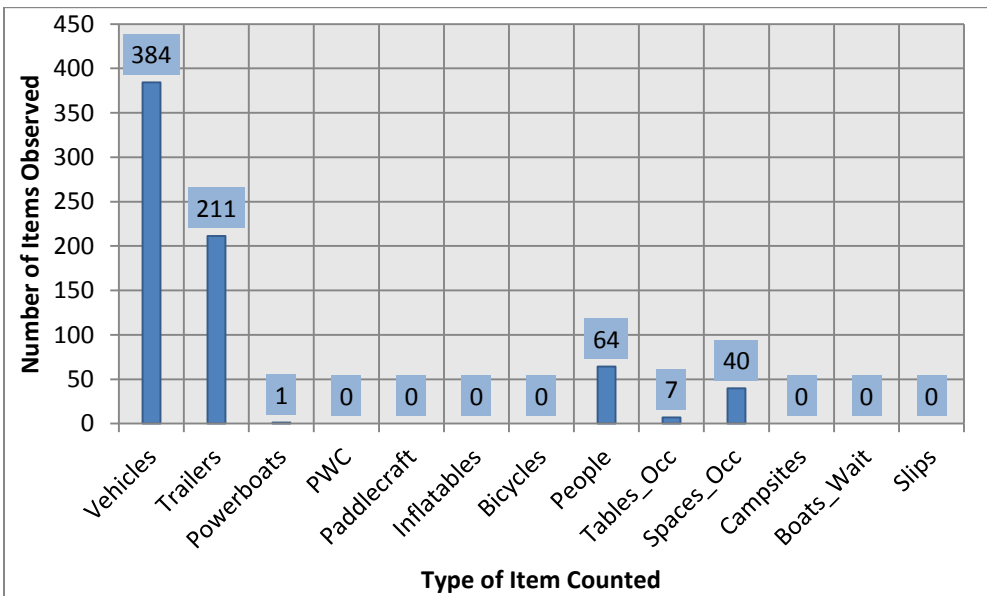


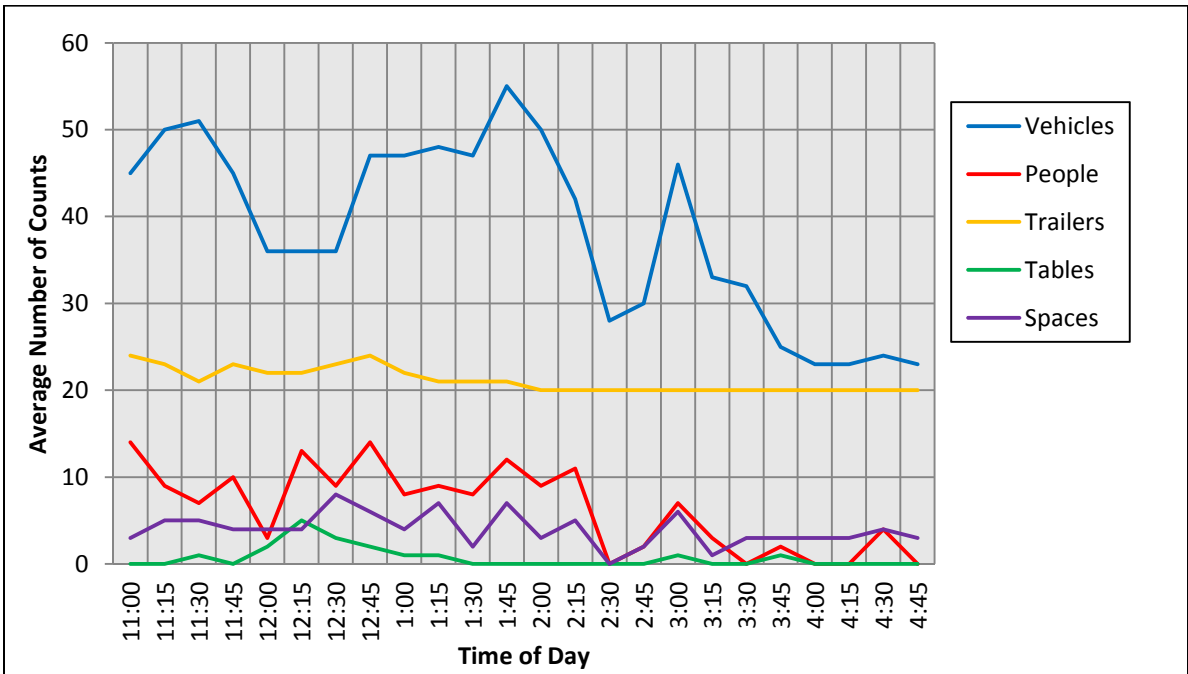
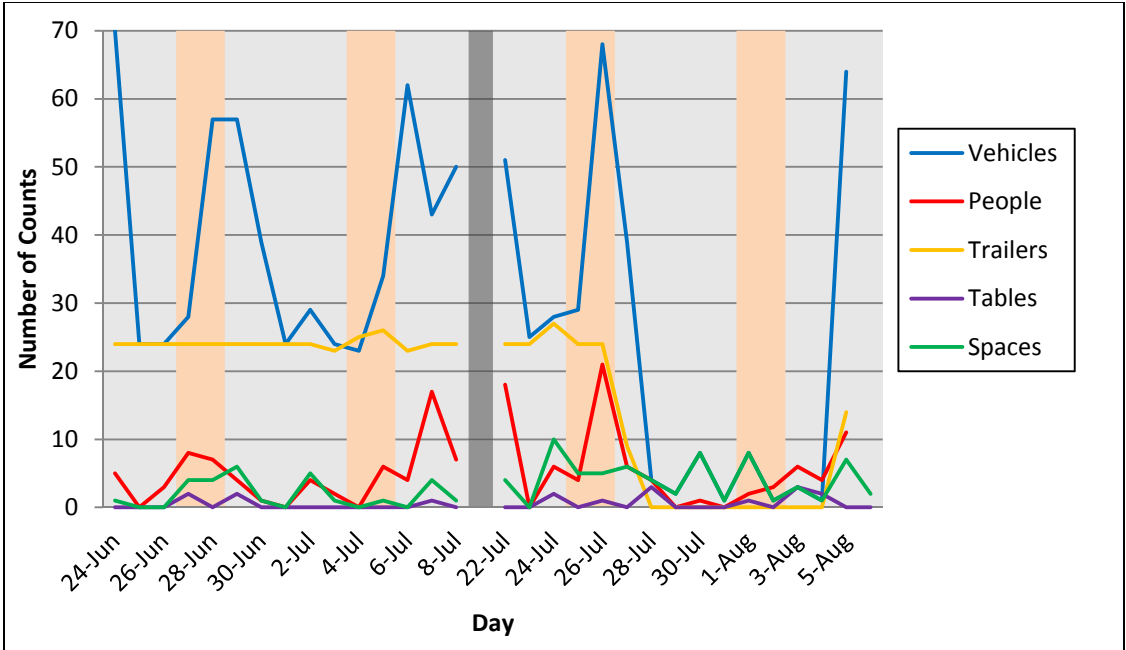


Wanapum Turbine Park (Picnic Area – Camera 2)

Site Name: **Wanapum Turbine Park**

Amenities: **Picnic Area**

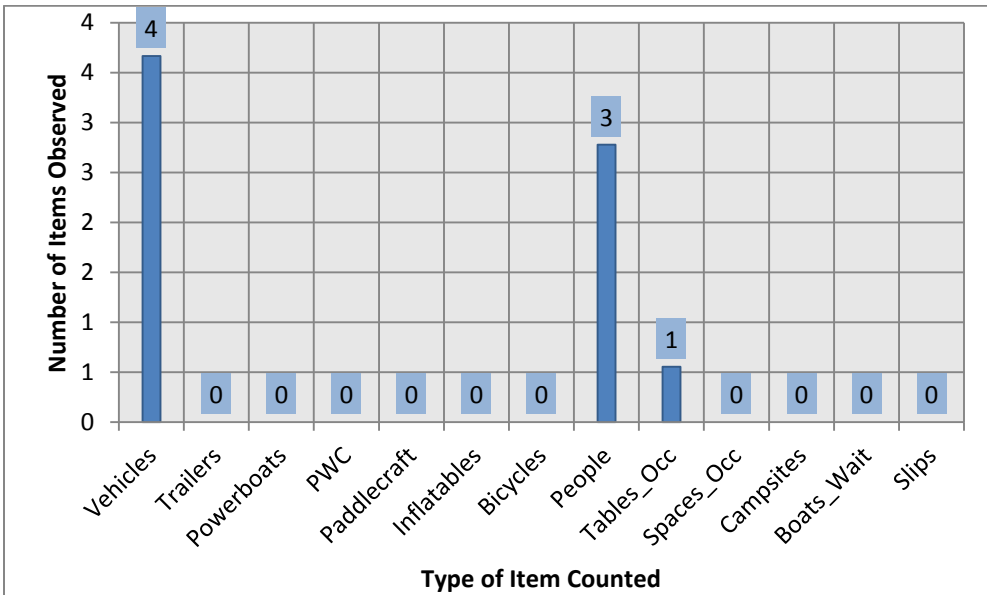


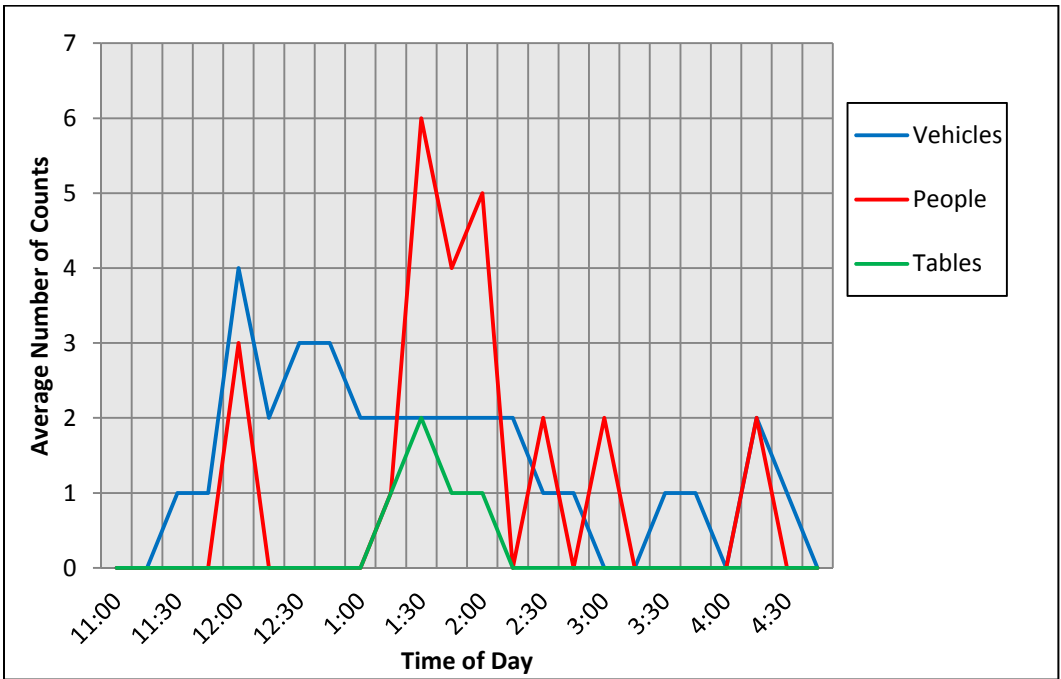
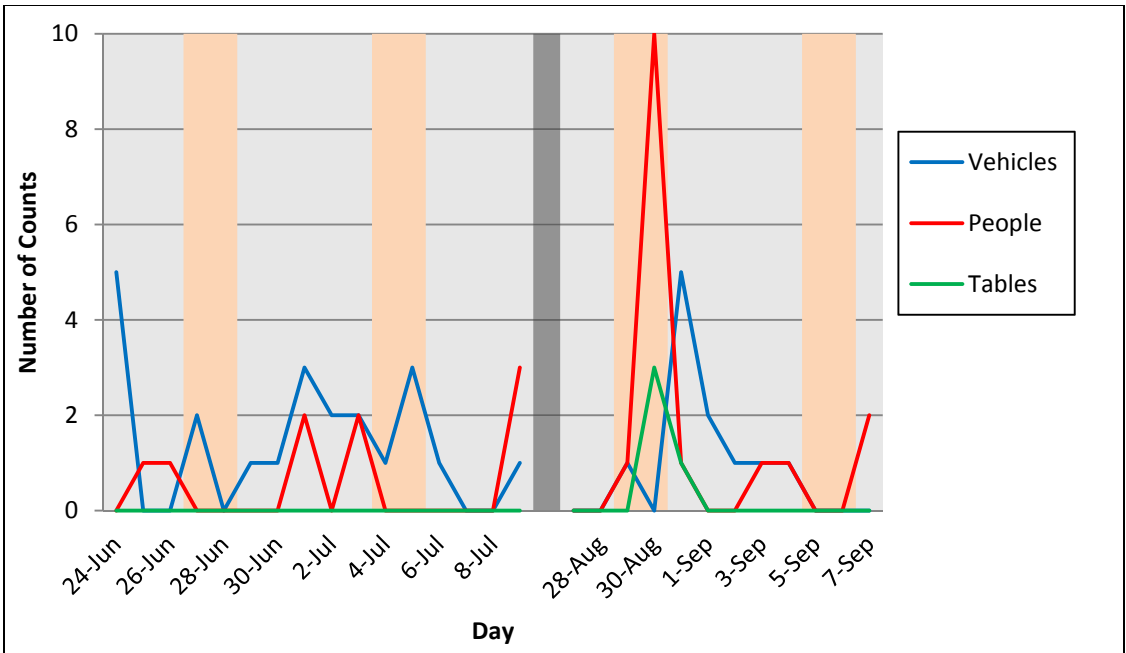


Wanapum Dam Overlook

Site Name: **Wanapum Dam Overlook**

Amenities: **Overlook Vista (All areas not marked otherwise)
Picnic Area**

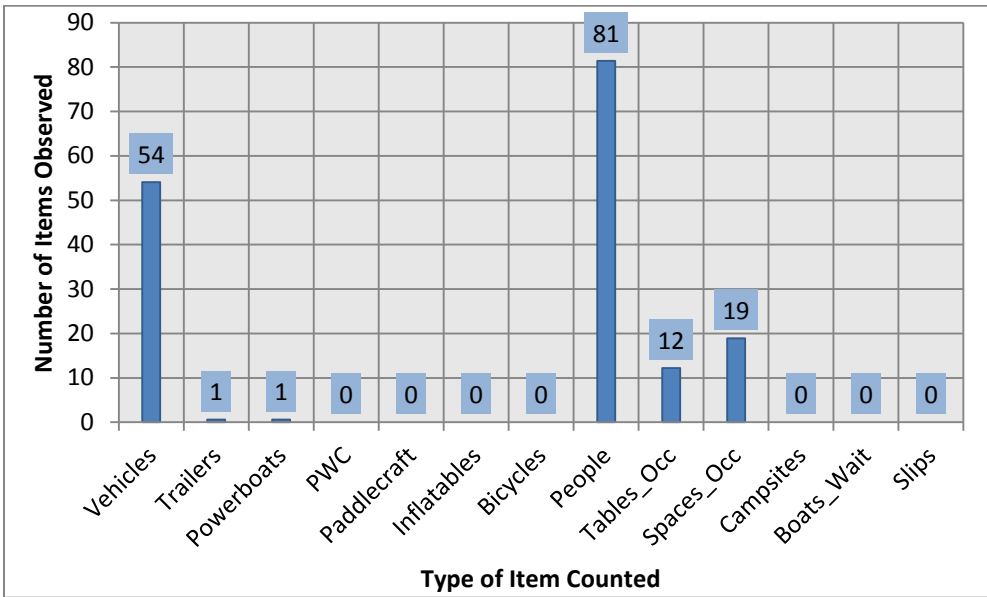
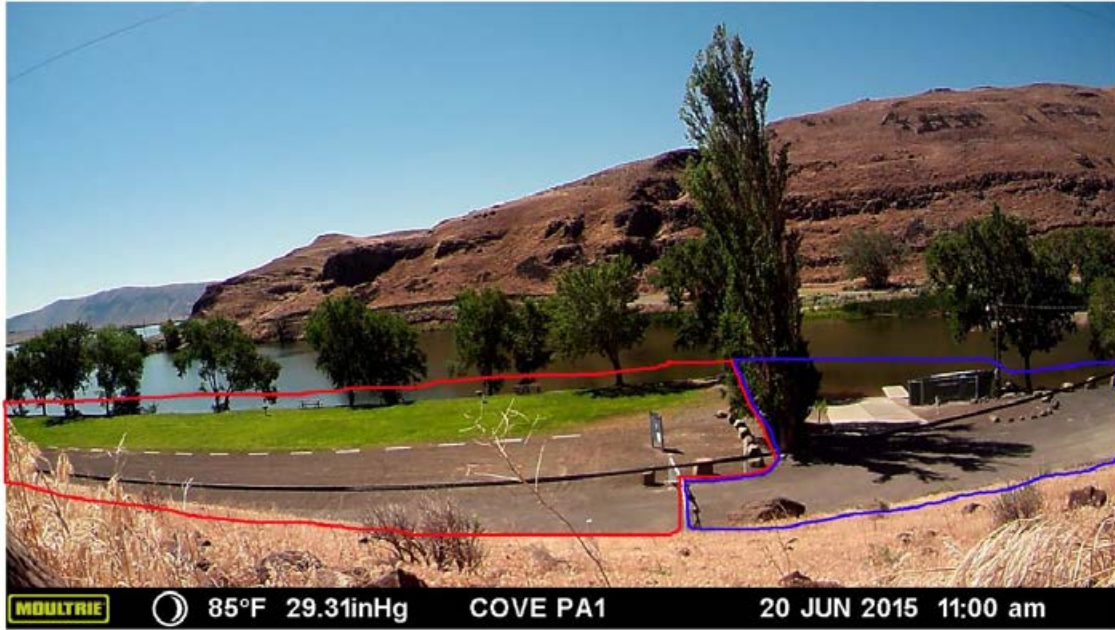


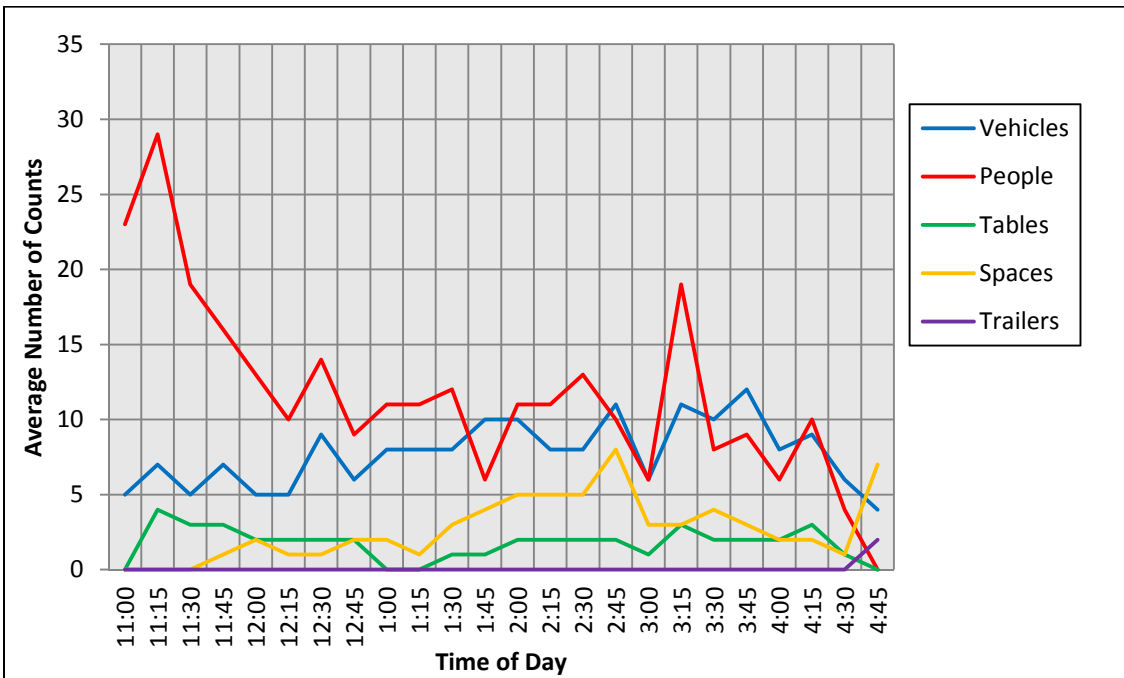
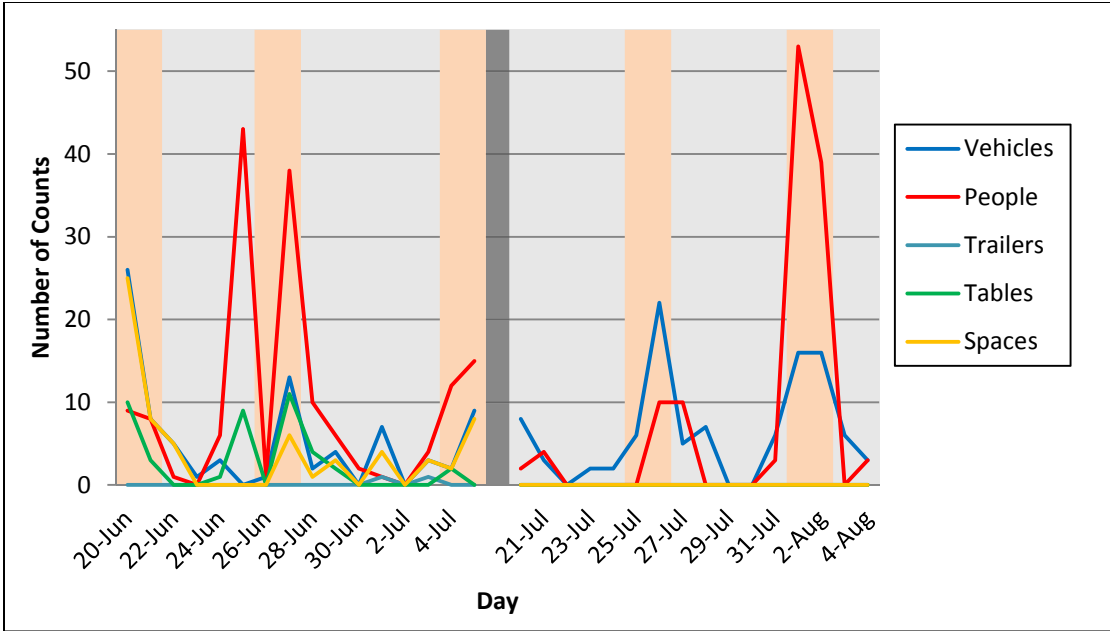


The Cove (Camera 1)

Site Name: **The Cove**

Amenities: **Boat Launch**
Picnic Area

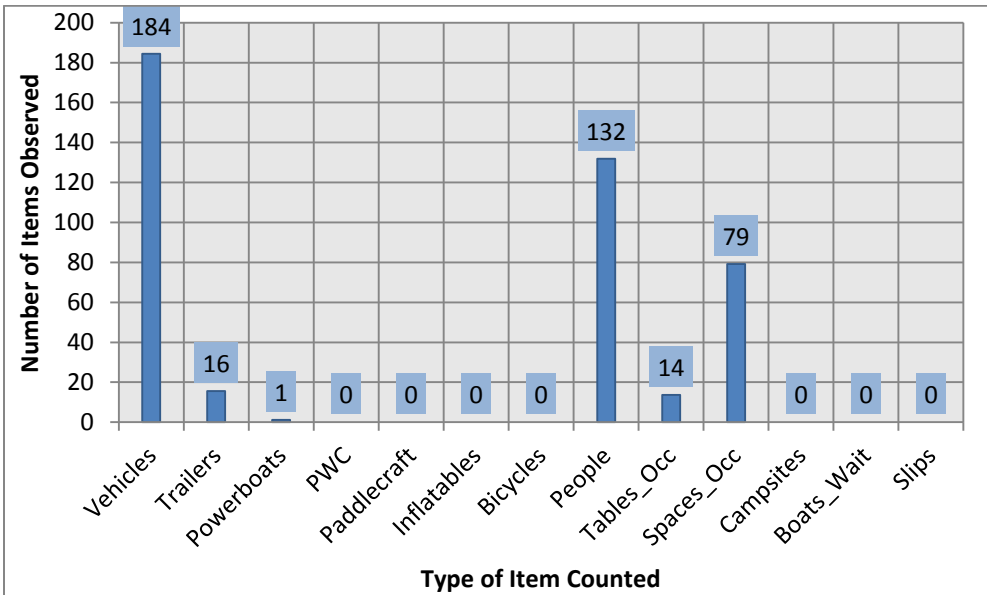


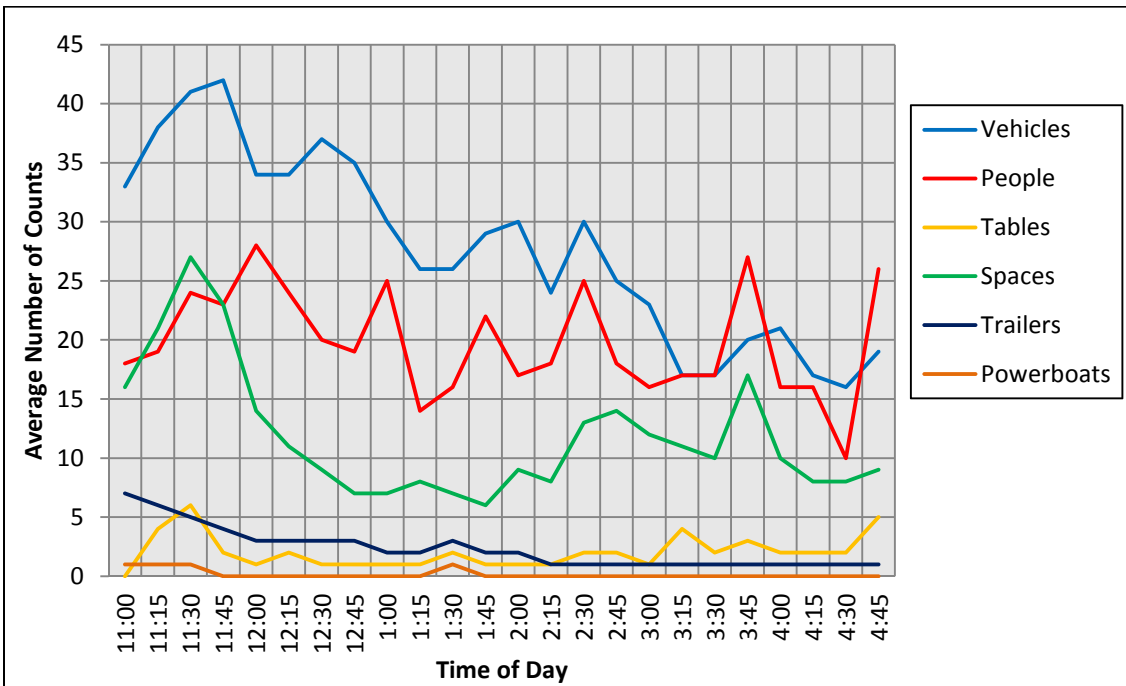
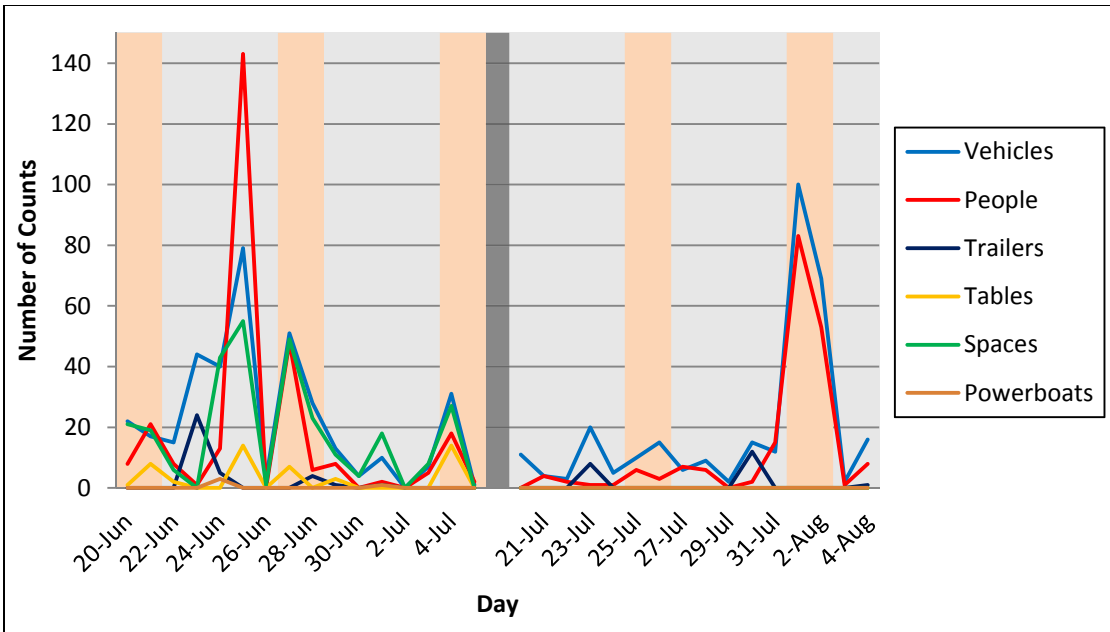


The Cove (Camera 2)

Site Name: **The Cove**

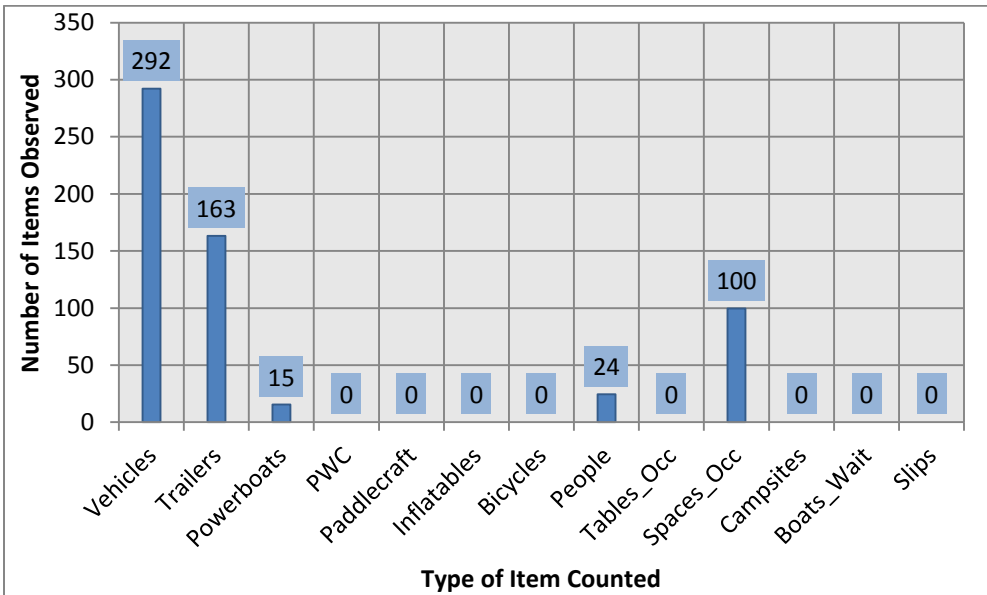
Amenities: **Picnic Area**

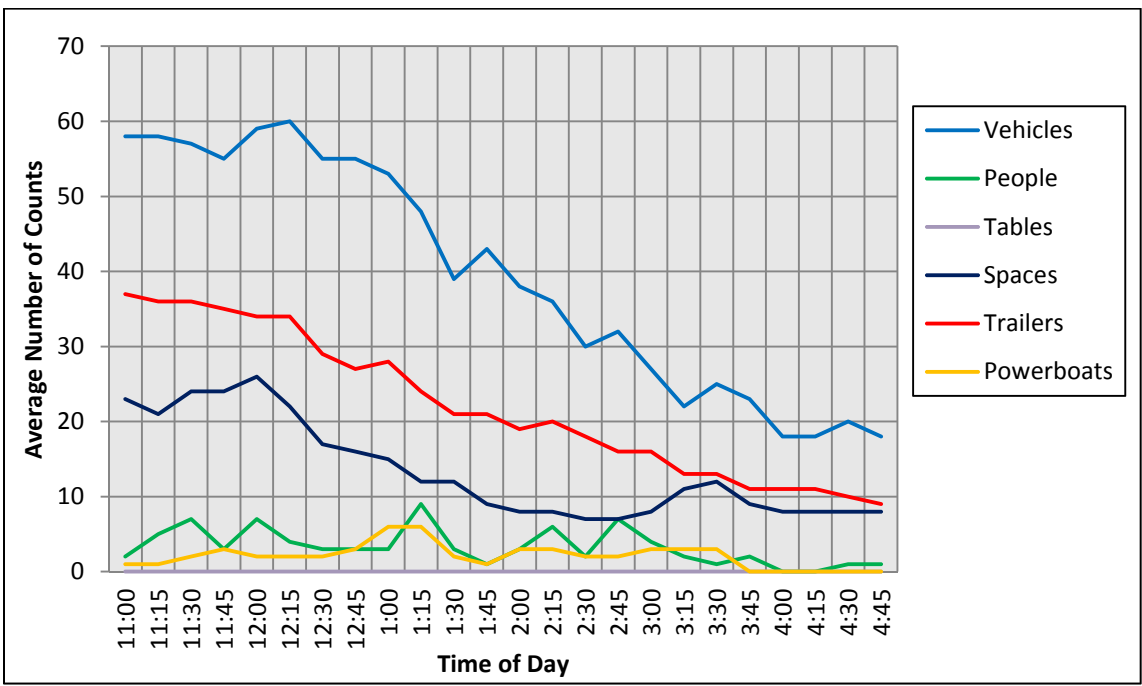
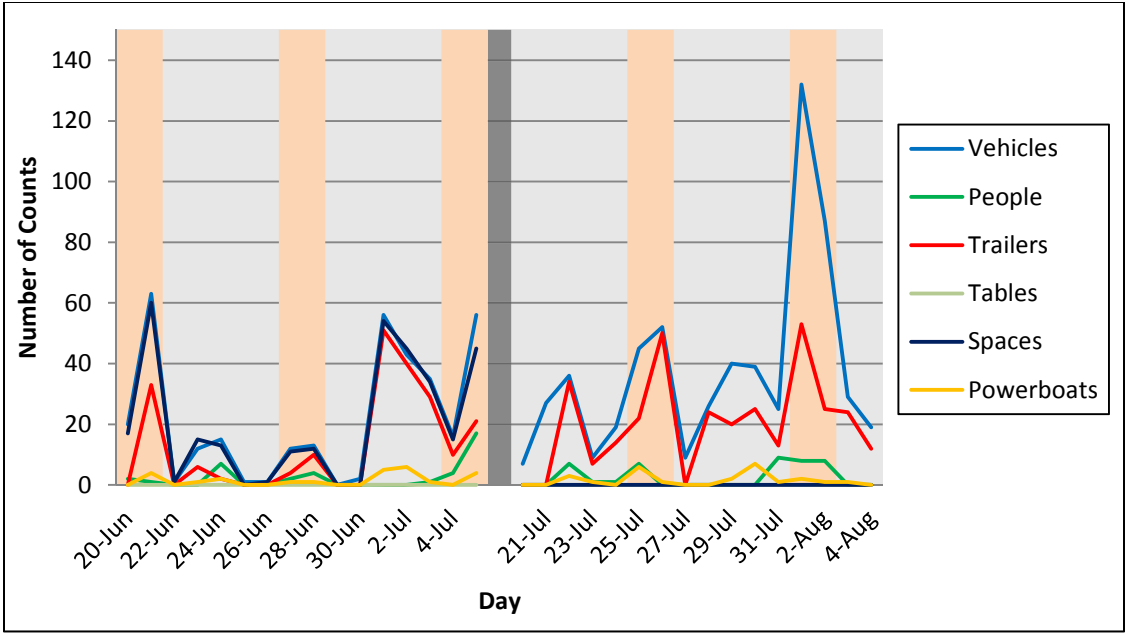




Huntzinger Road Boat Launch

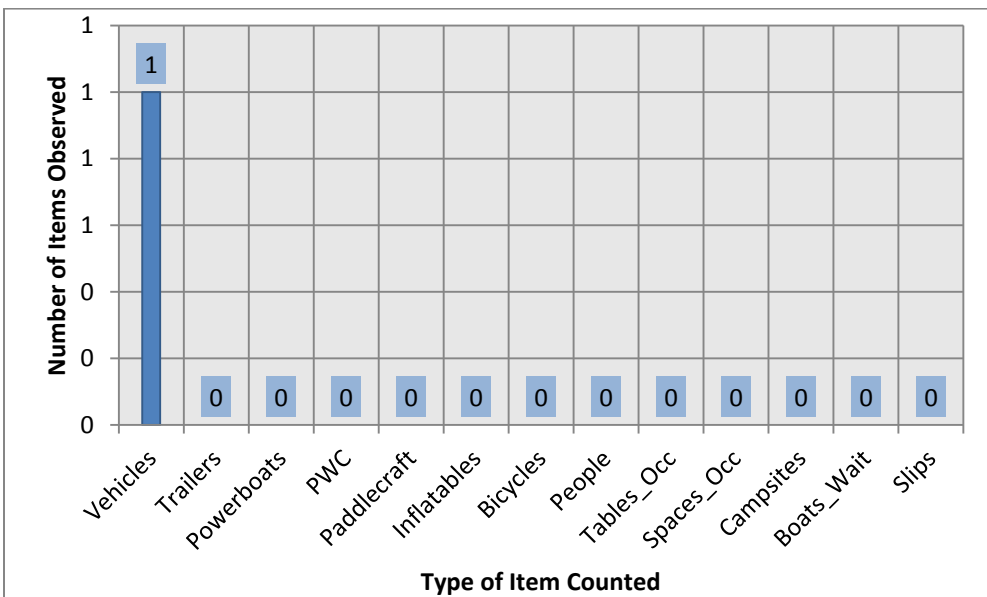
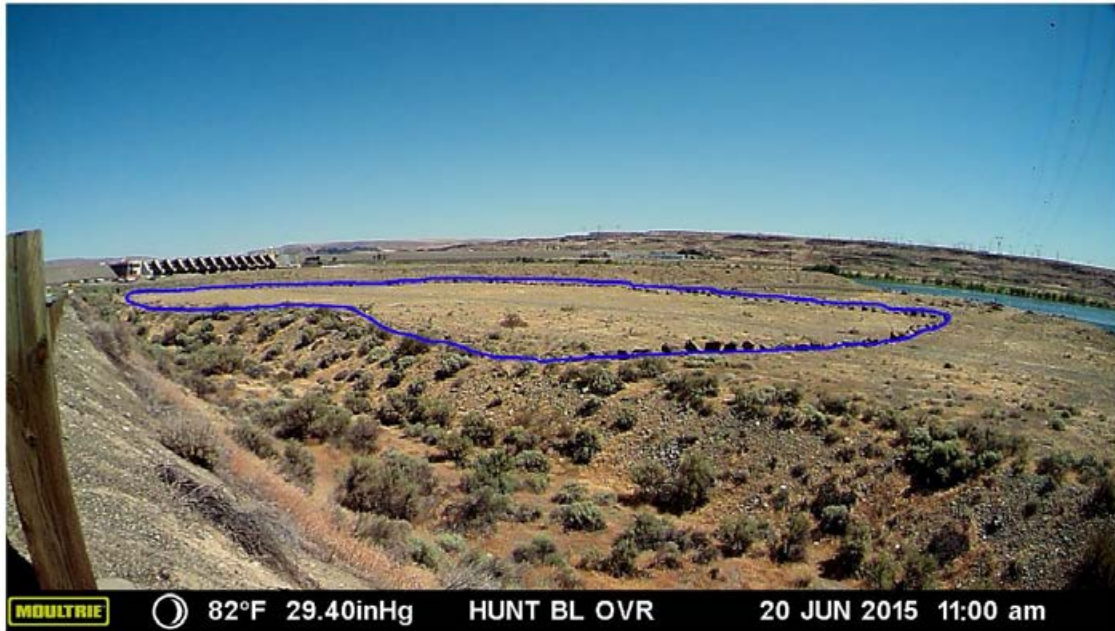
Site Name: **Huntzinger Road Boat Launch** Amenities: **Boat Launch**

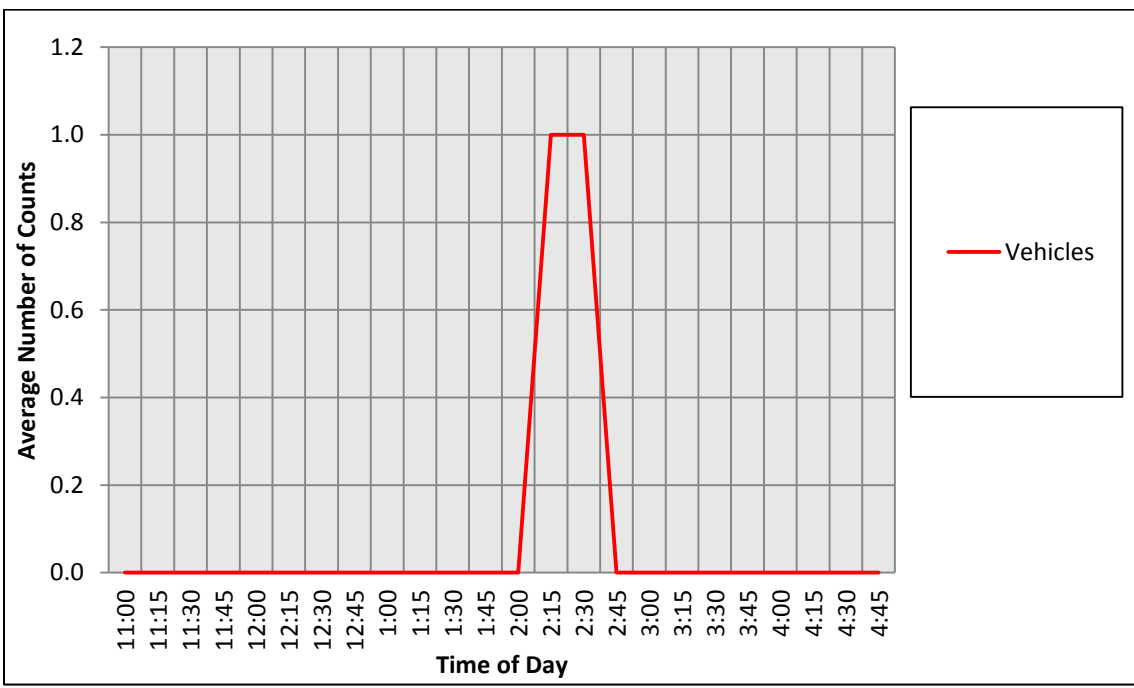
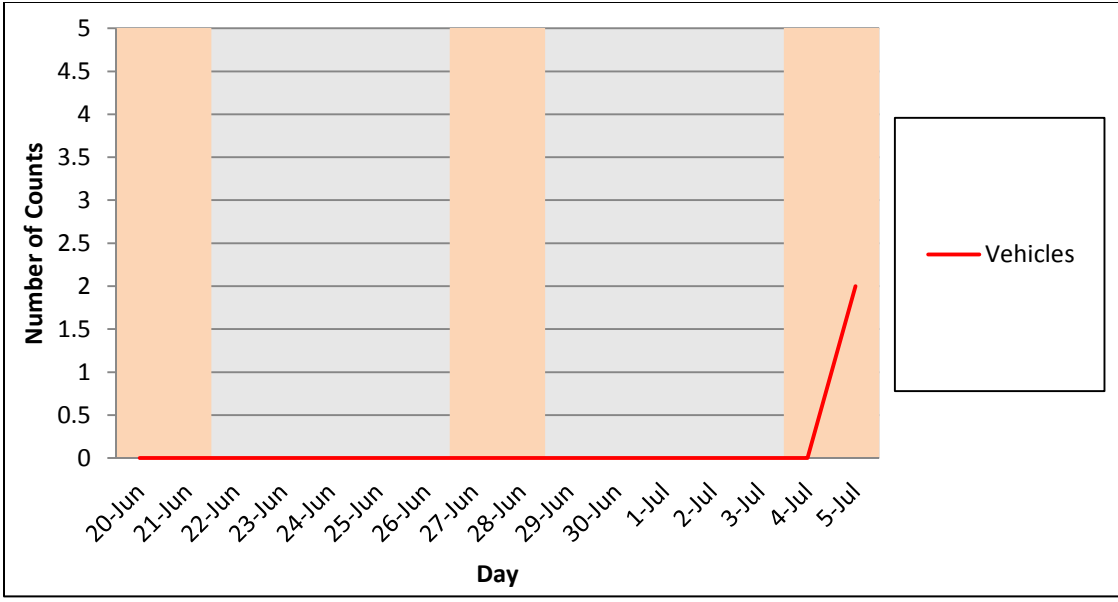




Huntzinger Road Boat Launch (Overflow)

Site Name: **Huntzinger Road Boat Launch** Amenities: **Boat Launch**

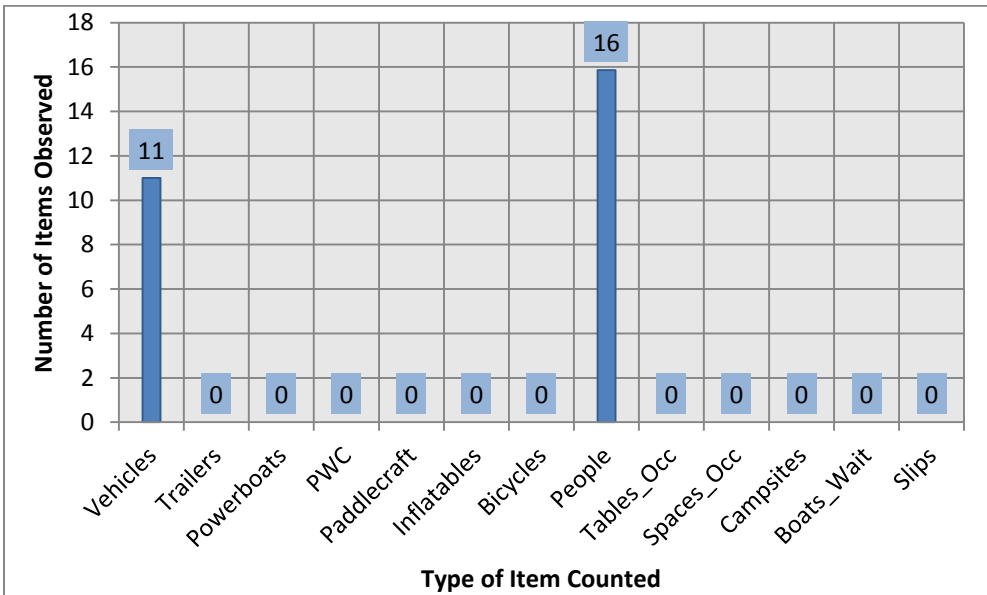


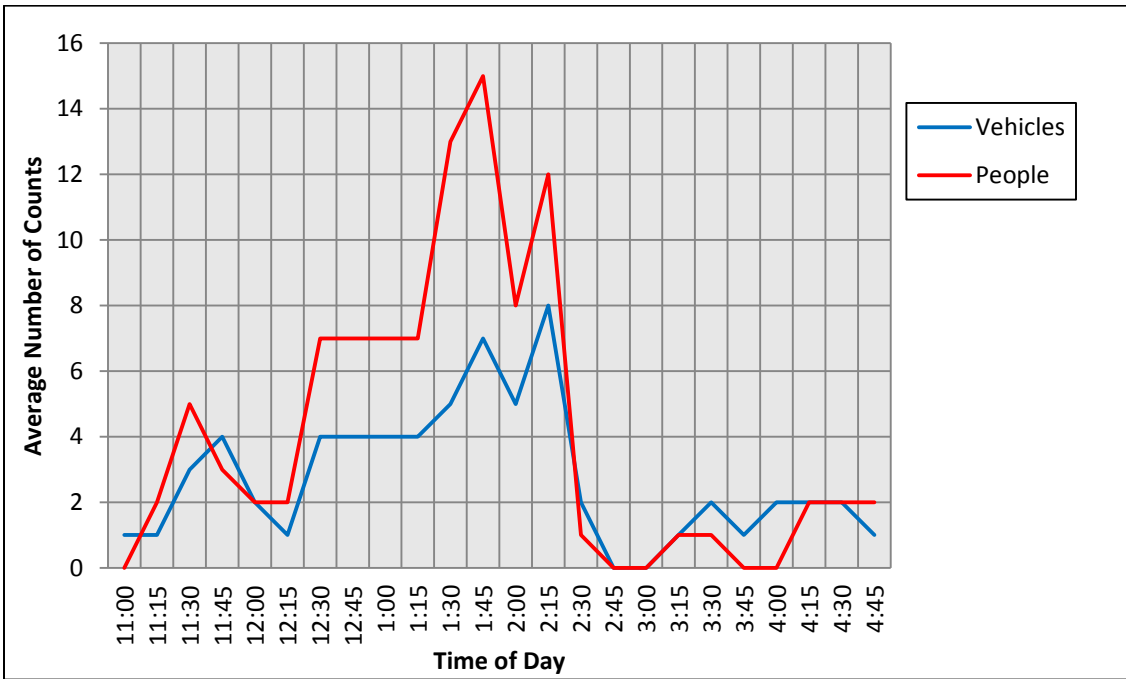
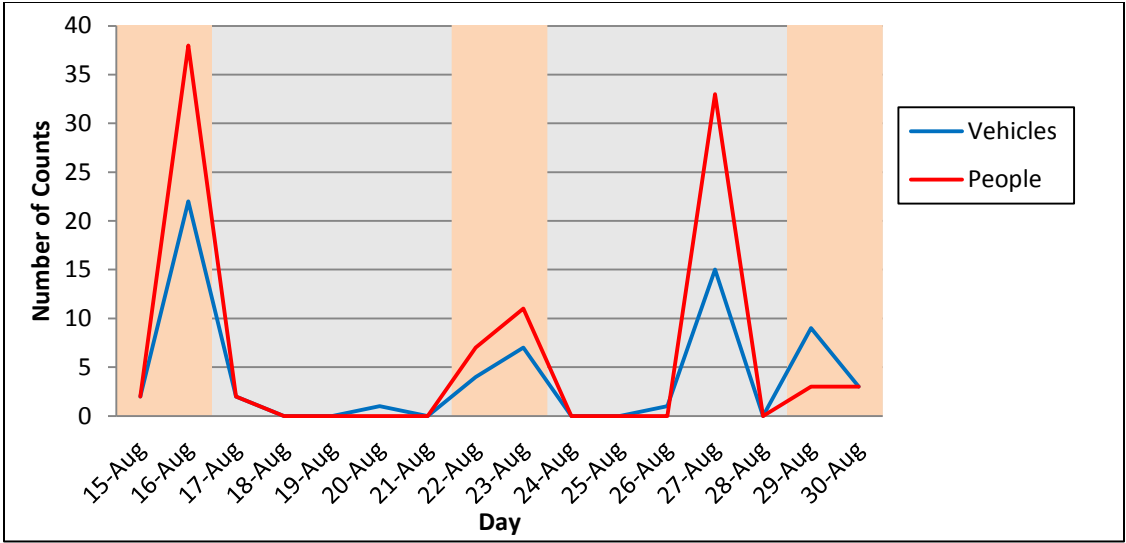


Huntzinger Road Fishing Access Site

Site Name: **Huntzinger Road Fishing Access Site**

Amenities: **Reservoir Fishing Amenity**

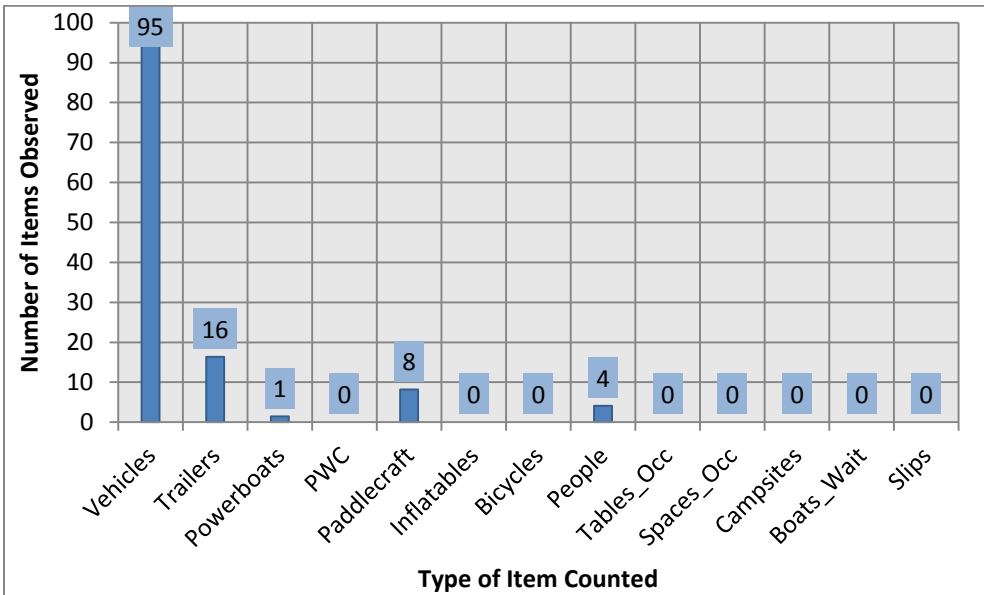


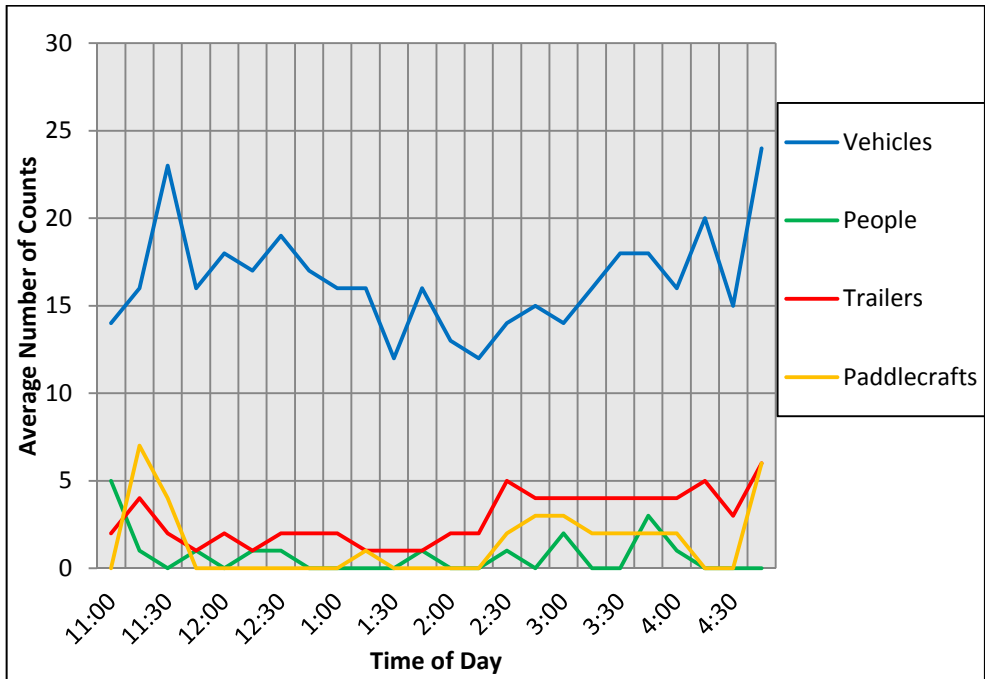
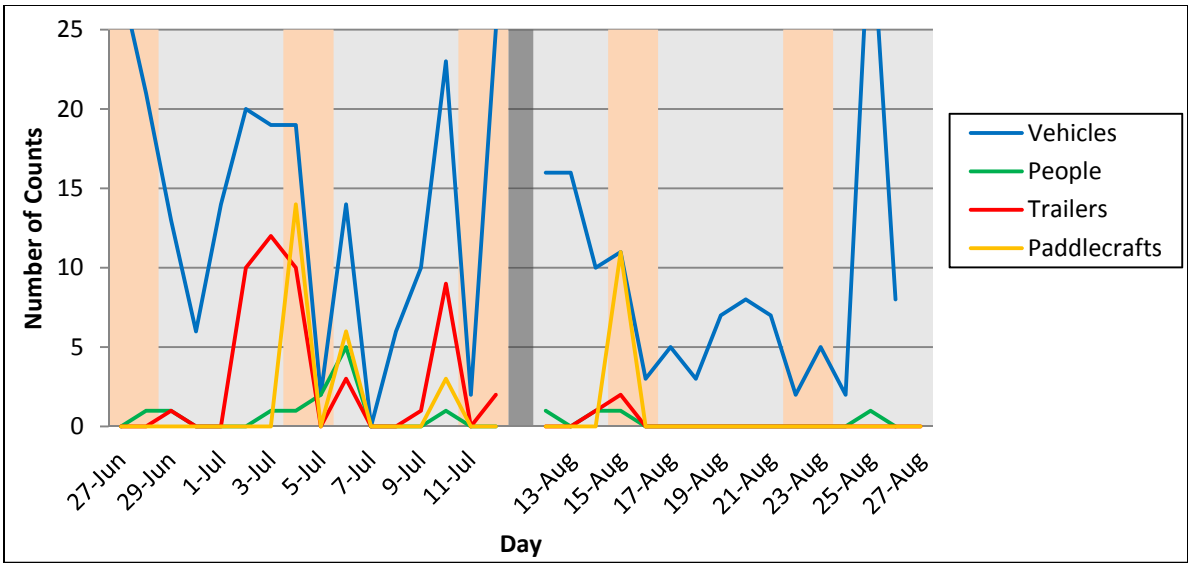


Buckshot Recreation Area

Site Name: **Buckshot Recreation Area**

Amenities: **Boat Launch**

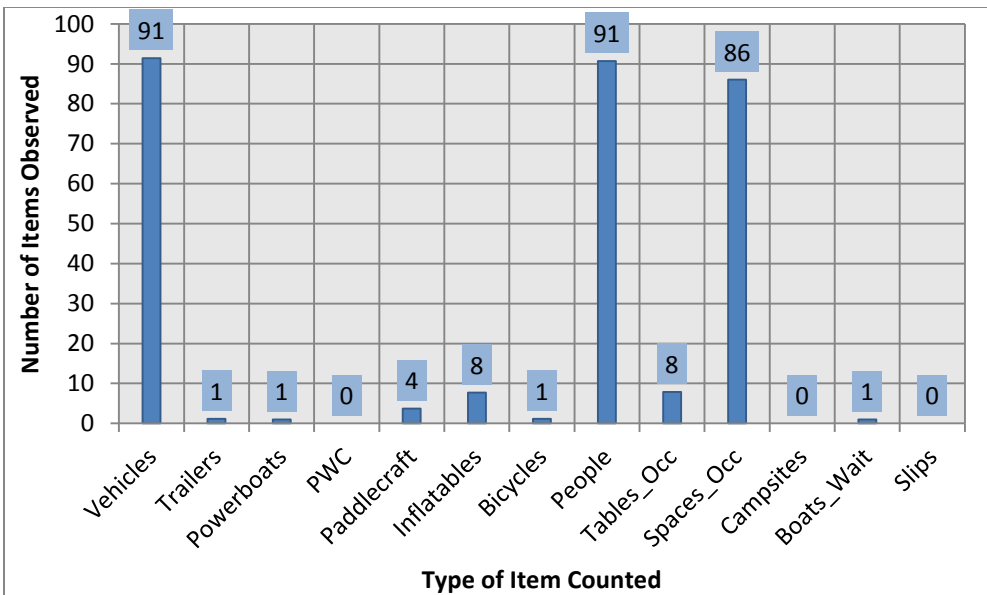


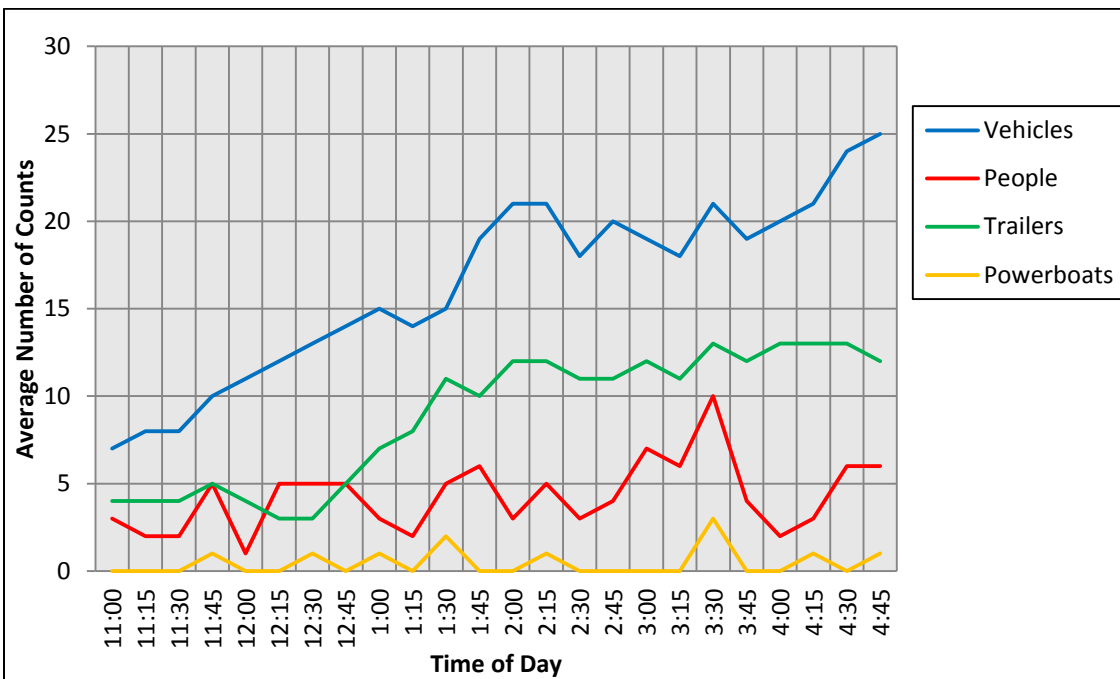
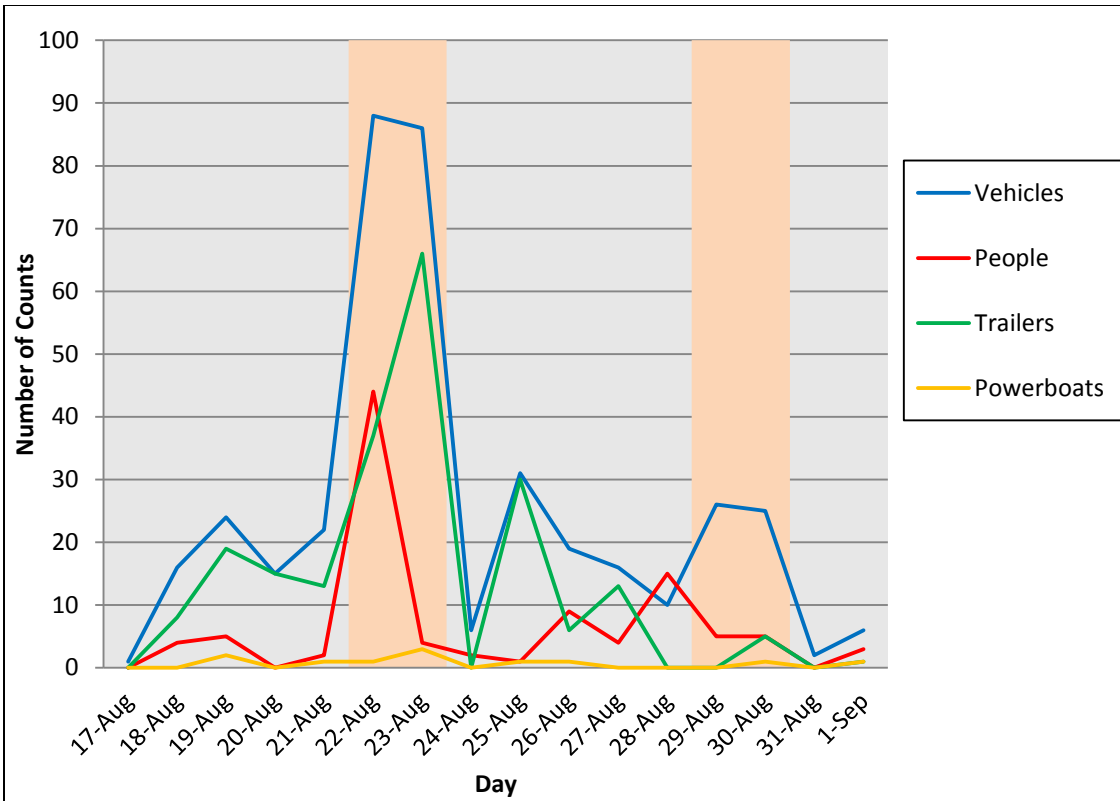


Yo Yo Rock Boat Launch

Site Name: Yo Yo Rock Boat Launch

Amenities: **Boat Launch**

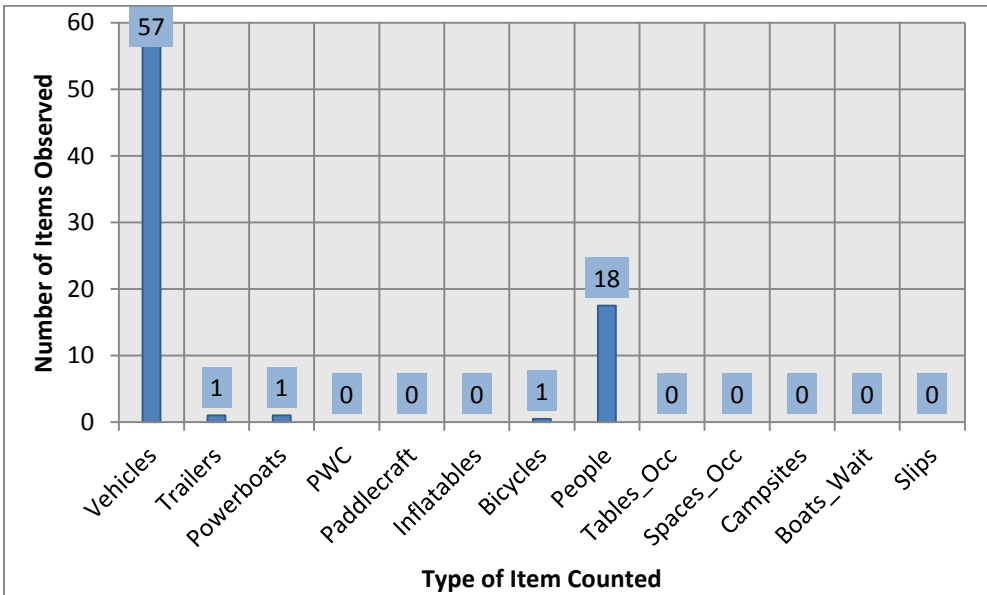


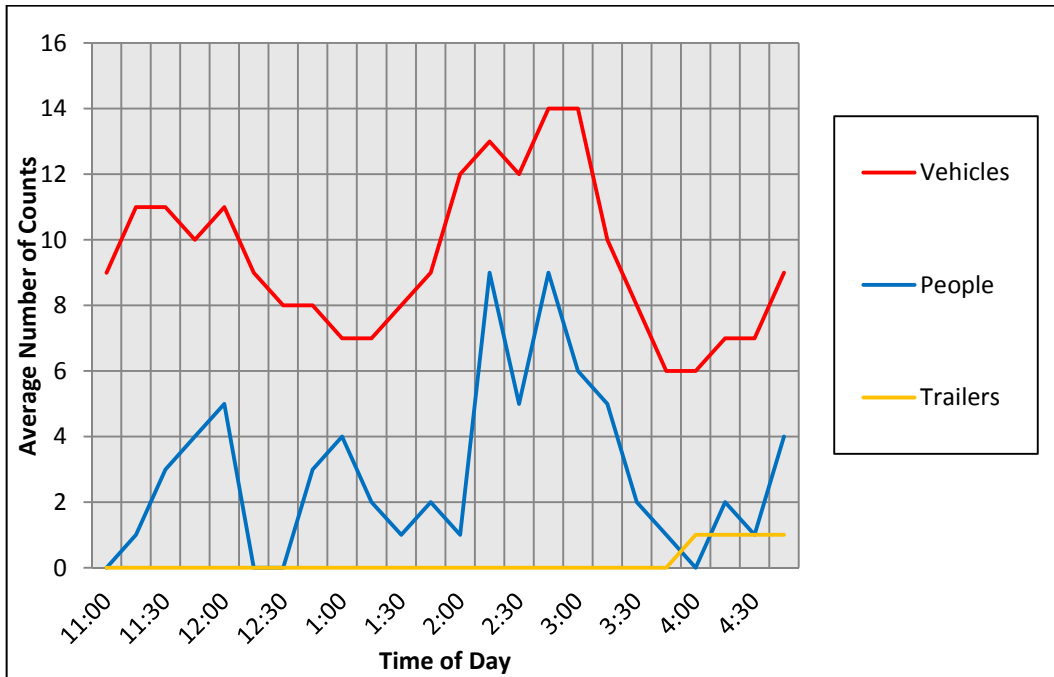
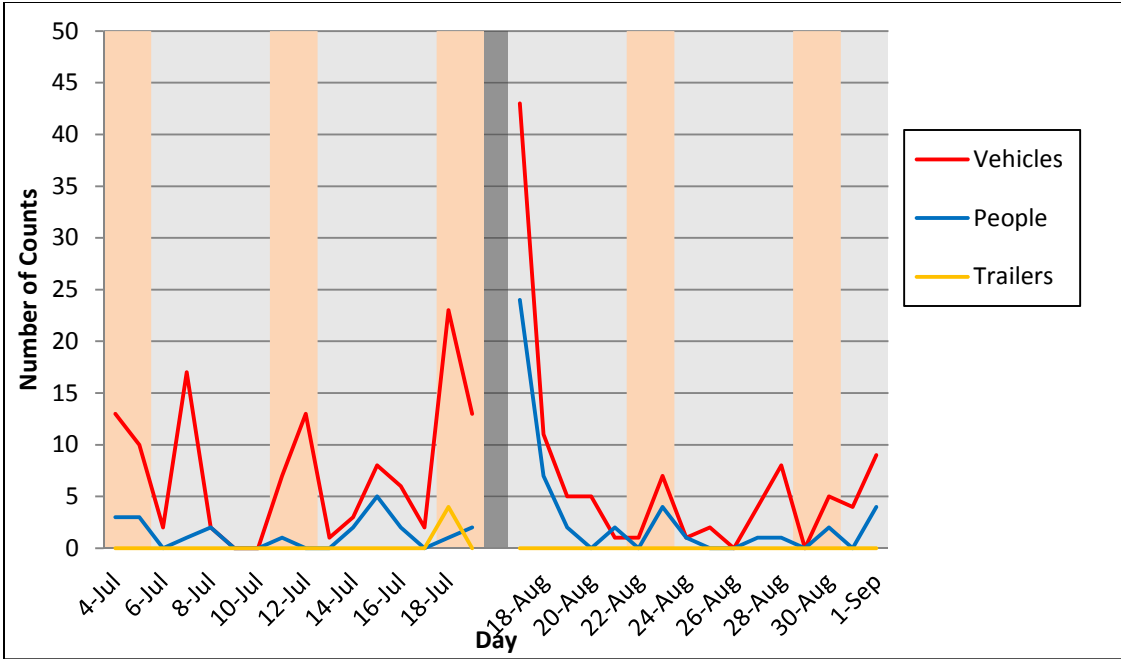


Jackson Creek Fish Camp

Site Name: Jackson Creek Fish Camp

Amenities: Tailwater Fishing Amenity

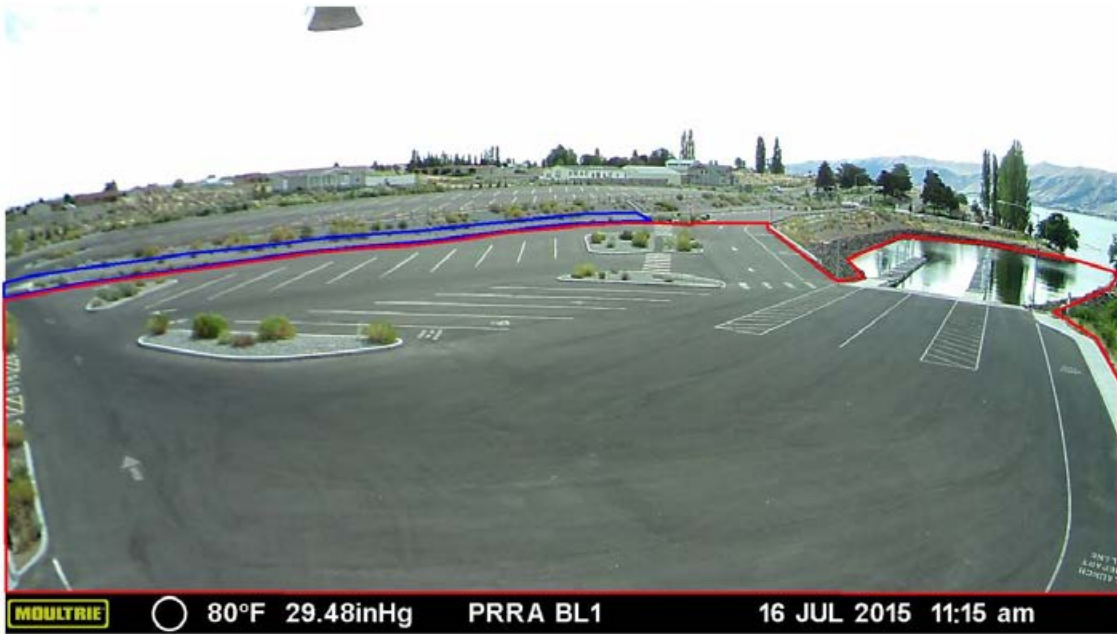




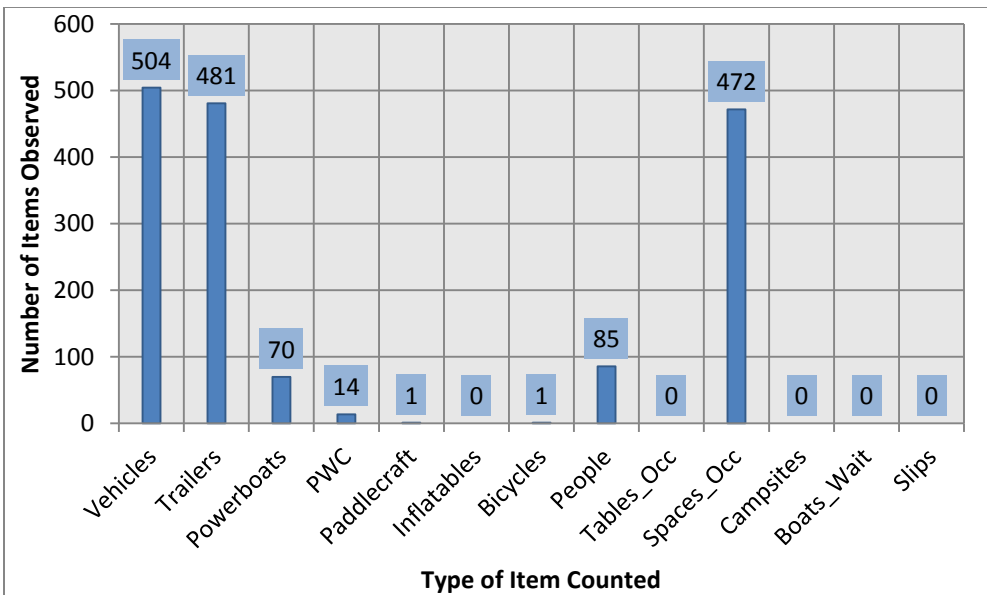
Priest Rapids Recreation Area (Boat Launch – Camera 1)

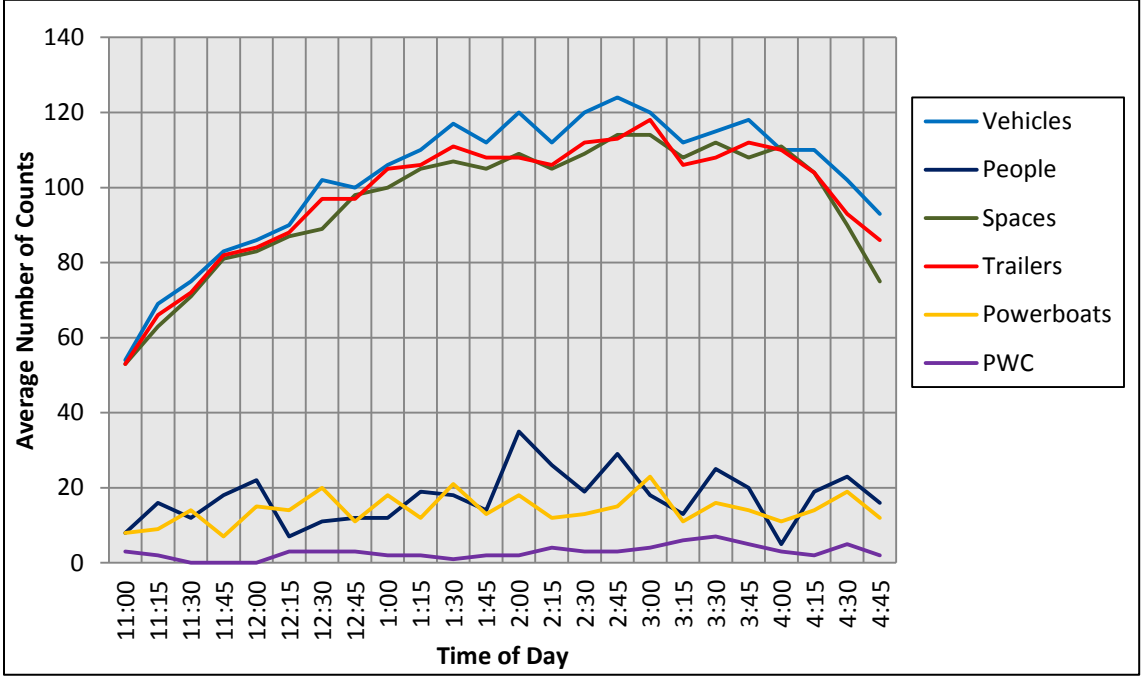
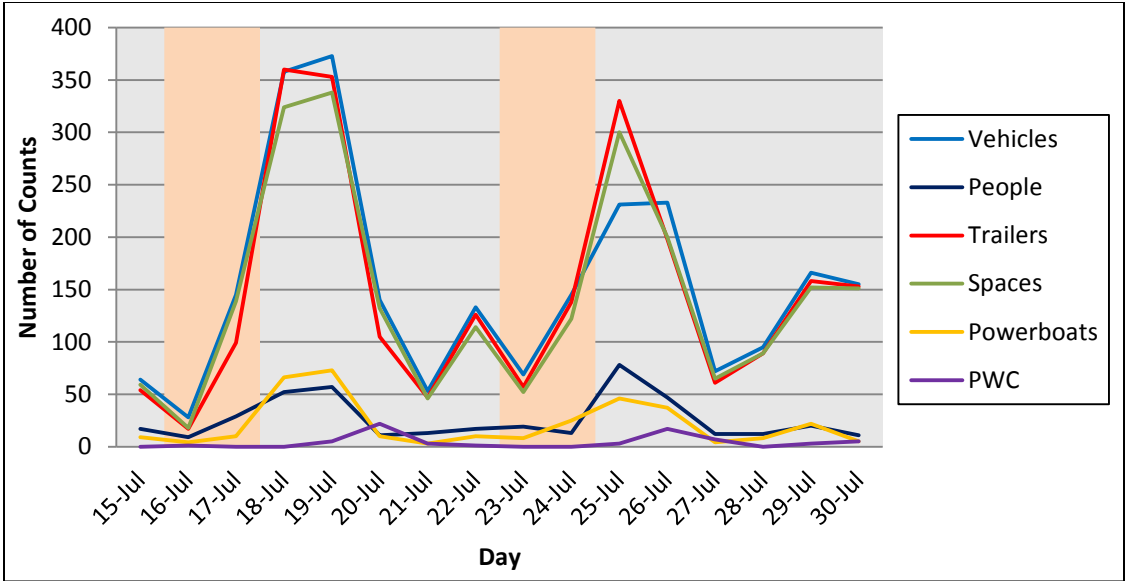
Site Name: **Priest Rapids Recreation Area**

Amenities: **Boat Launch**
Trail



MOULTRIE ○ 80°F 29.48inHg **PRRA BL1** 16 JUL 2015 11:15 am

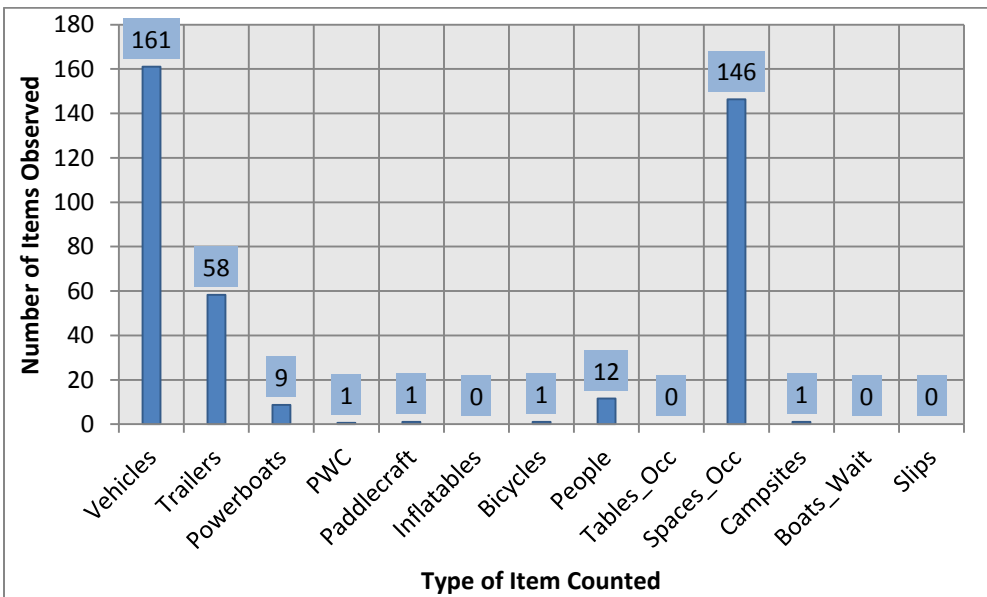


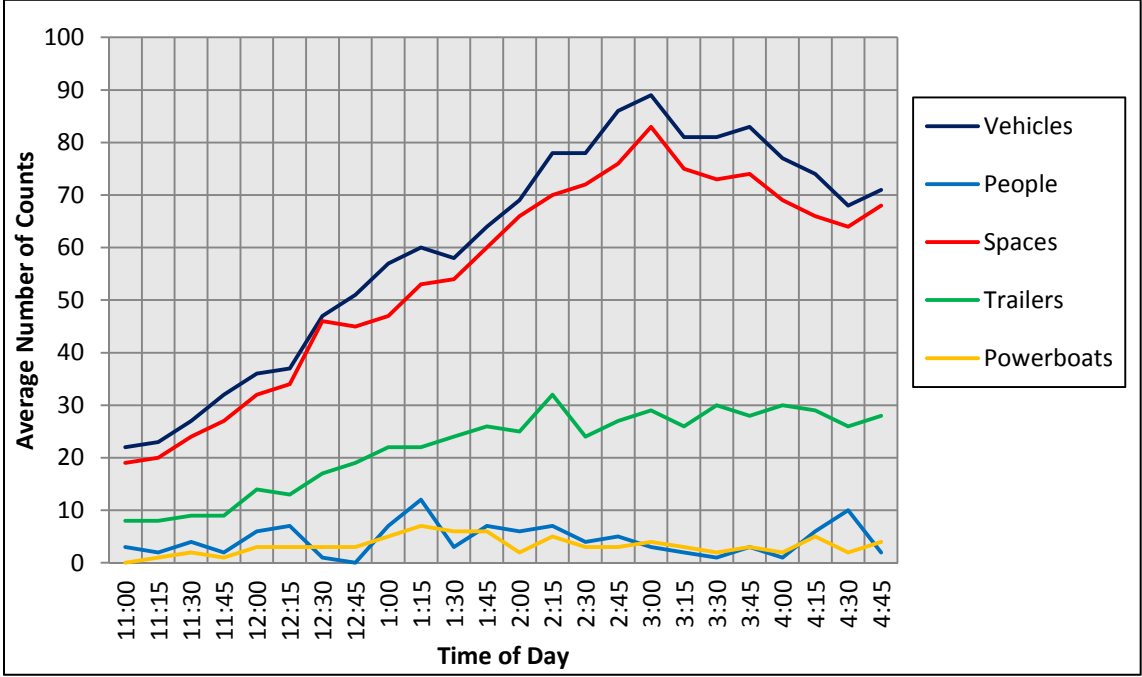
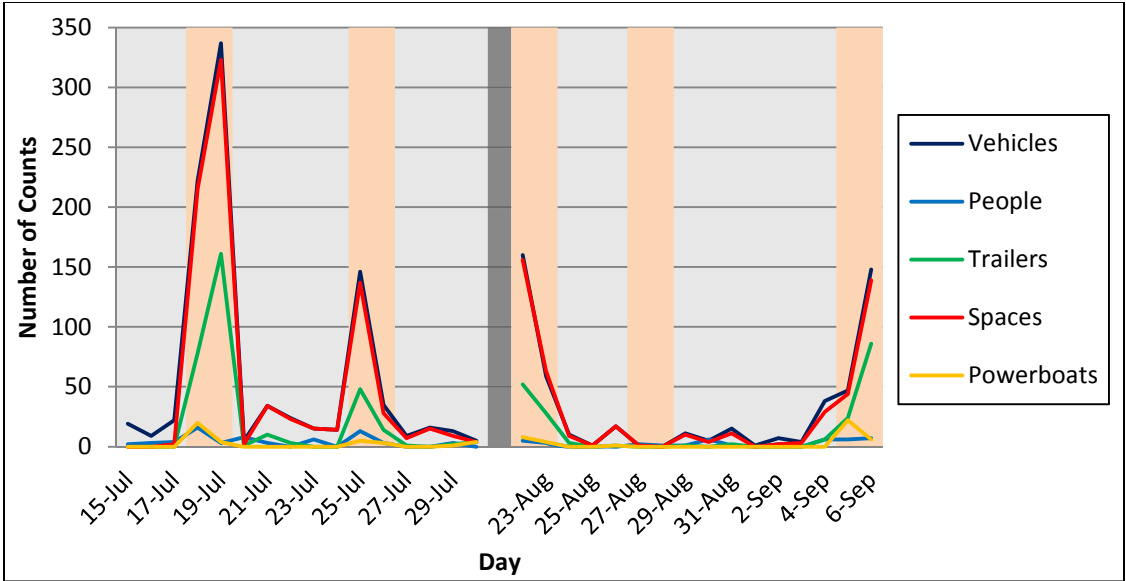


Priest Rapids Recreation Area (Boat Launch – Camera 2)

Site Name: **Priest Rapids Recreation Area**

Amenities: **Boat Launch Trail**

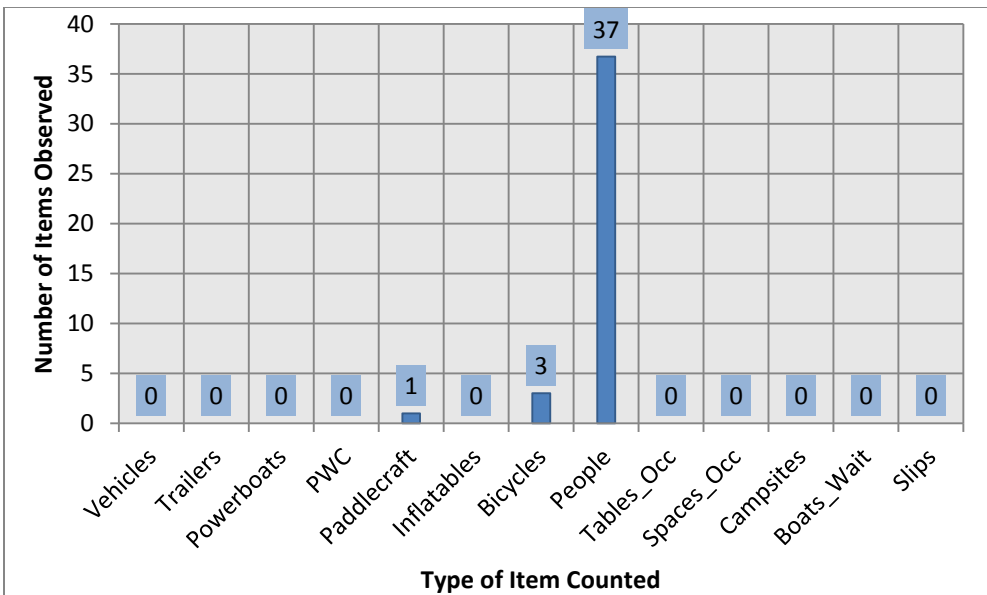


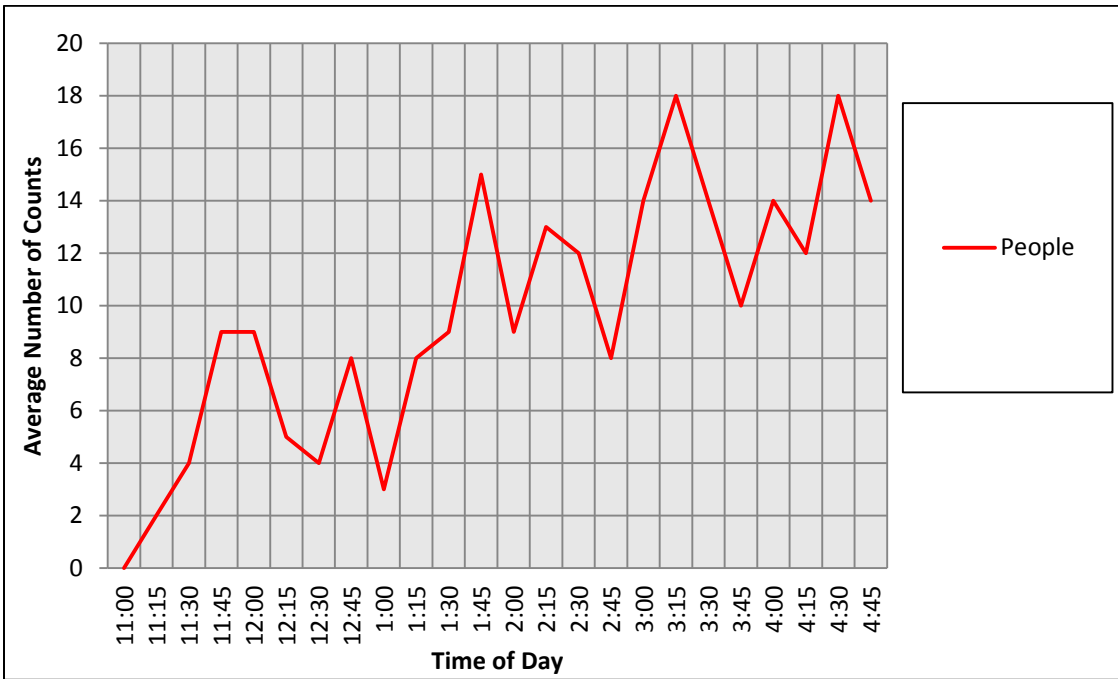
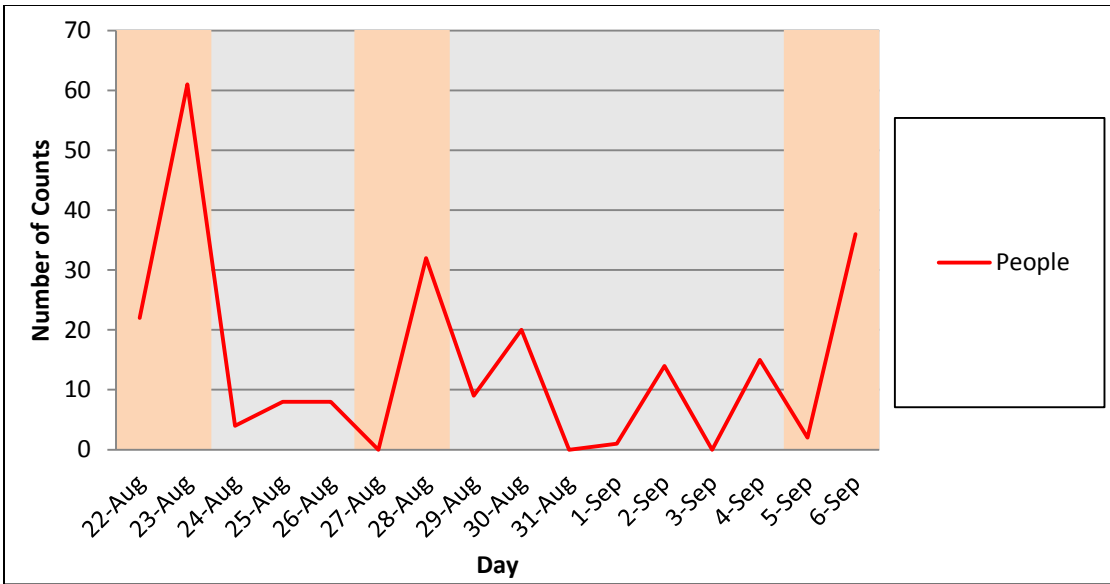


Priest Rapids Recreation Area - North Picnic Area

Site Name: **Priest Rapids Recreation Area**

Amenities: **Picnic Area**

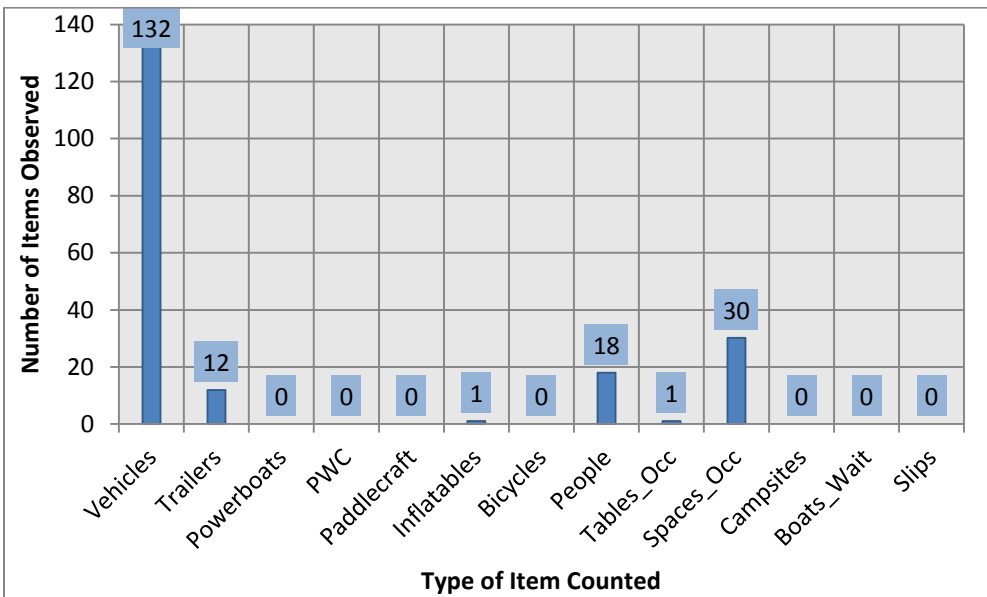


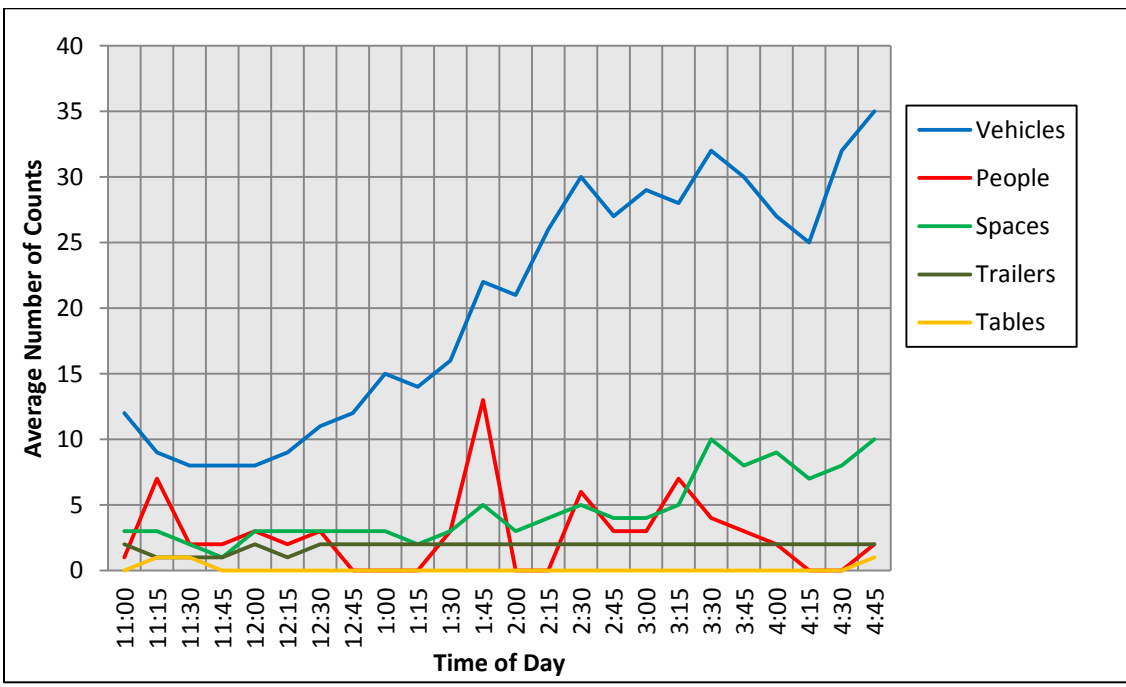
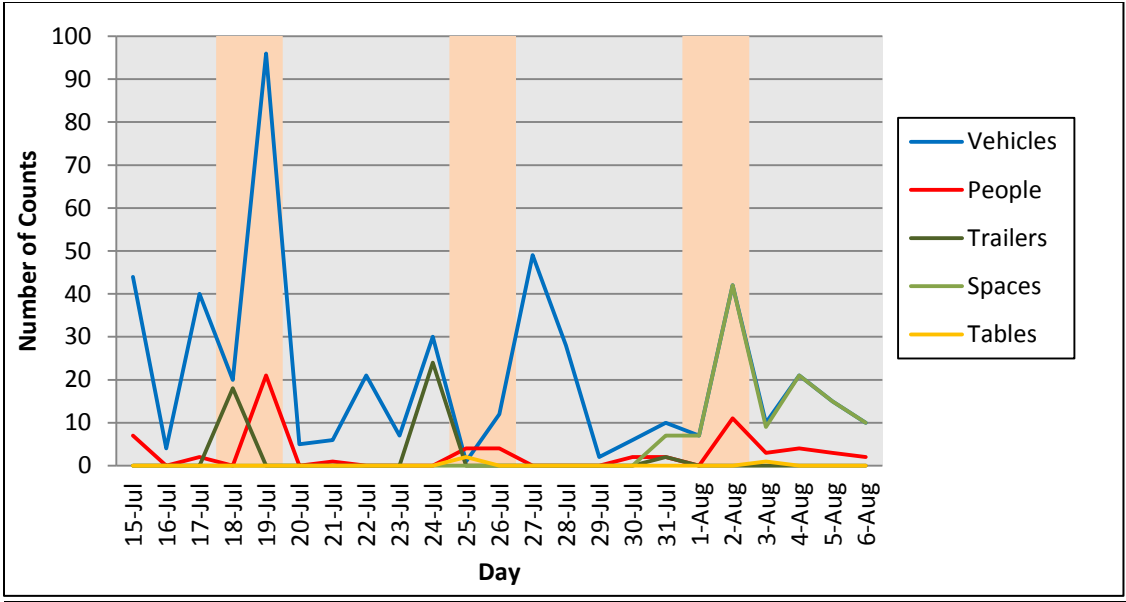


Priest Rapids Water Trail North Trailhead

Site Name: **Priest Rapids Recreation Area**

Amenities: **Picnic Area**
Water Trail Boat Launch

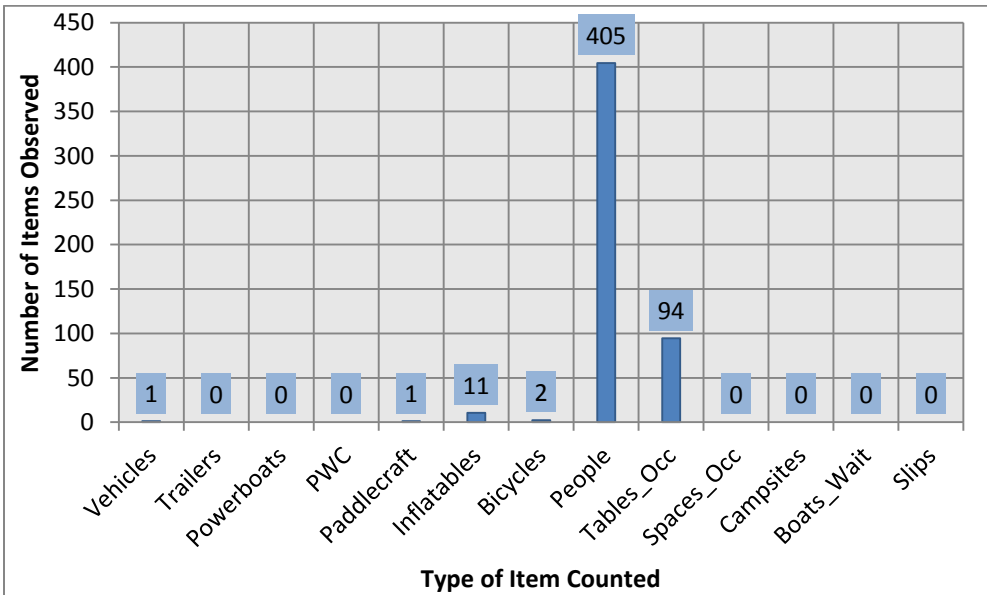


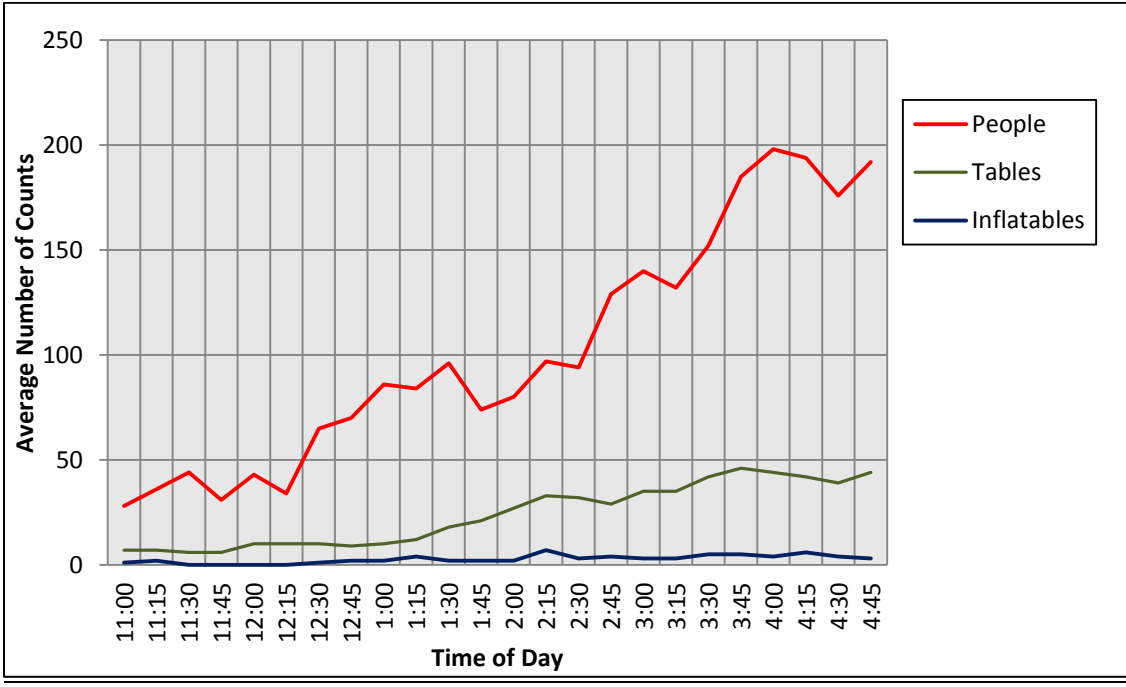
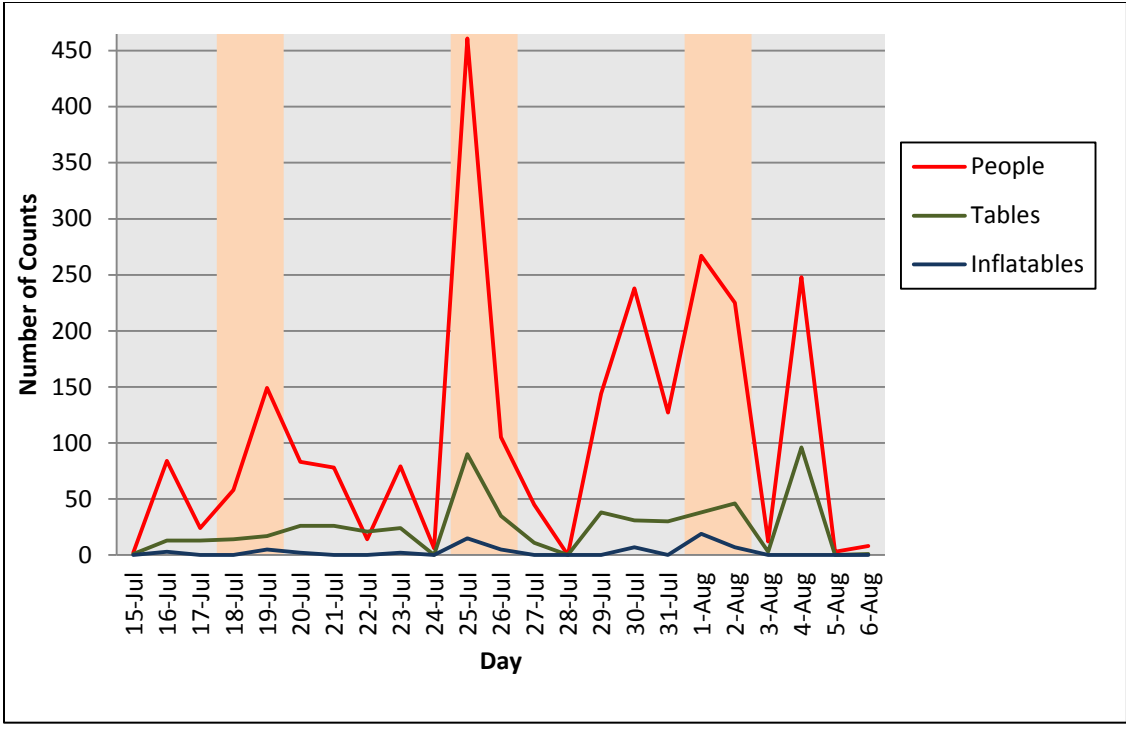


Priest Rapids Recreation Area (Picnic Area – Camera 1)

Site Name: **Priest Rapids Recreation Area**

Amenities: **Picnic Area**
Trail

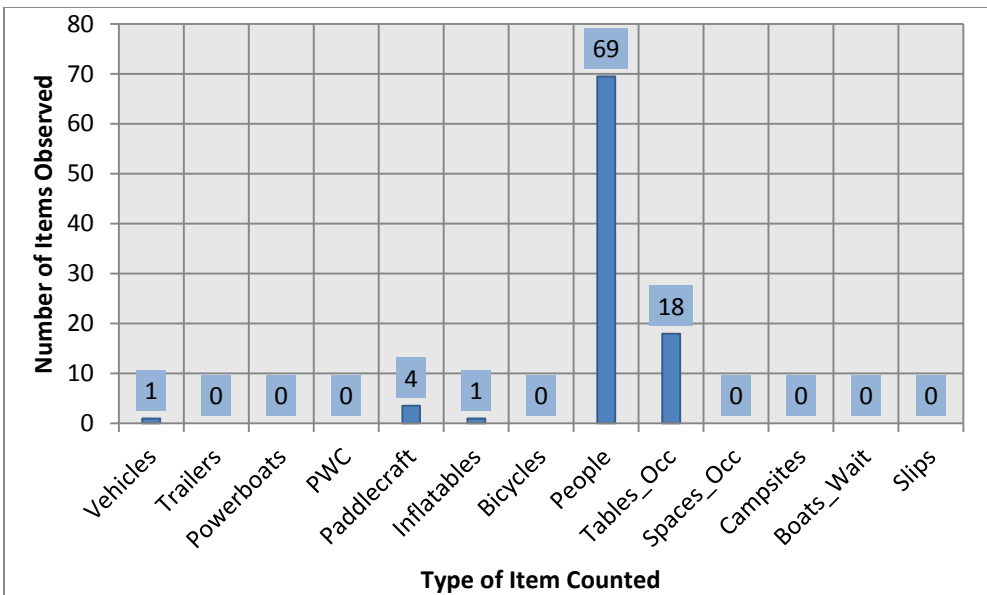


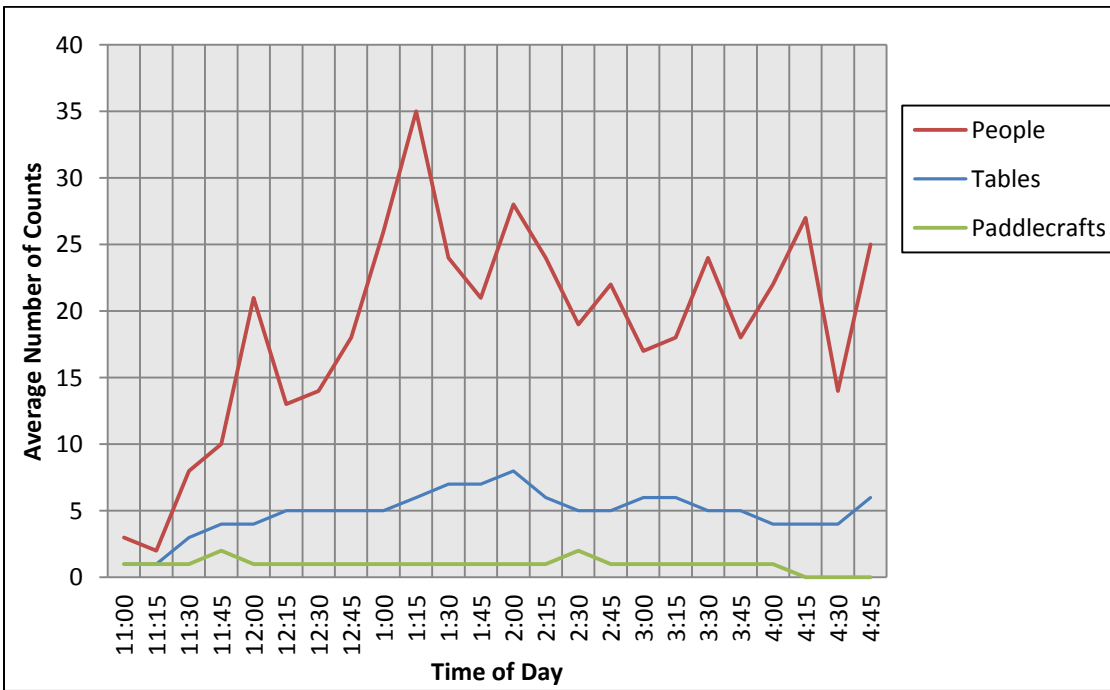
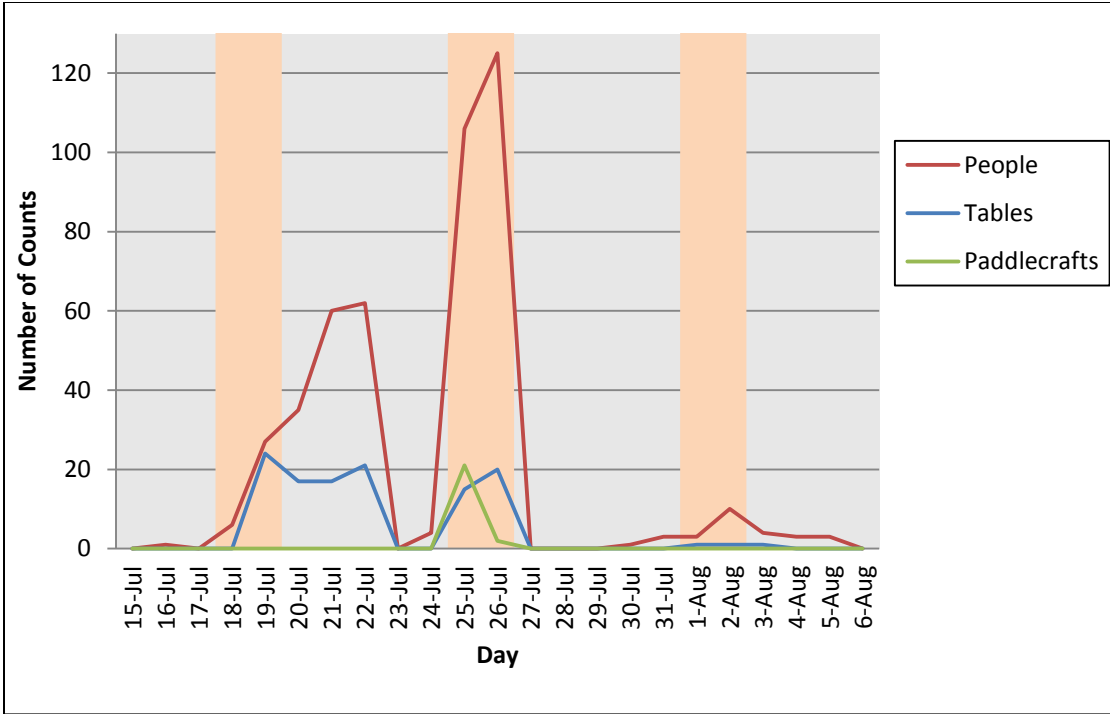


Priest Rapids Recreation Area (Picnic Area – Camera 2)

Site Name: **Priest Rapids Recreation Area**

Amenities: **Picnic Area**
Trail

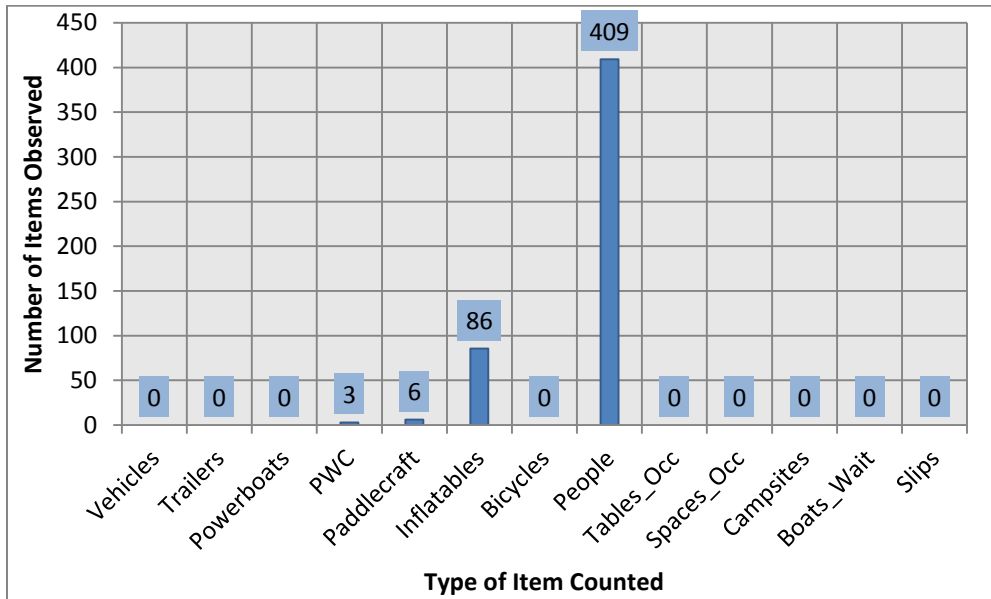


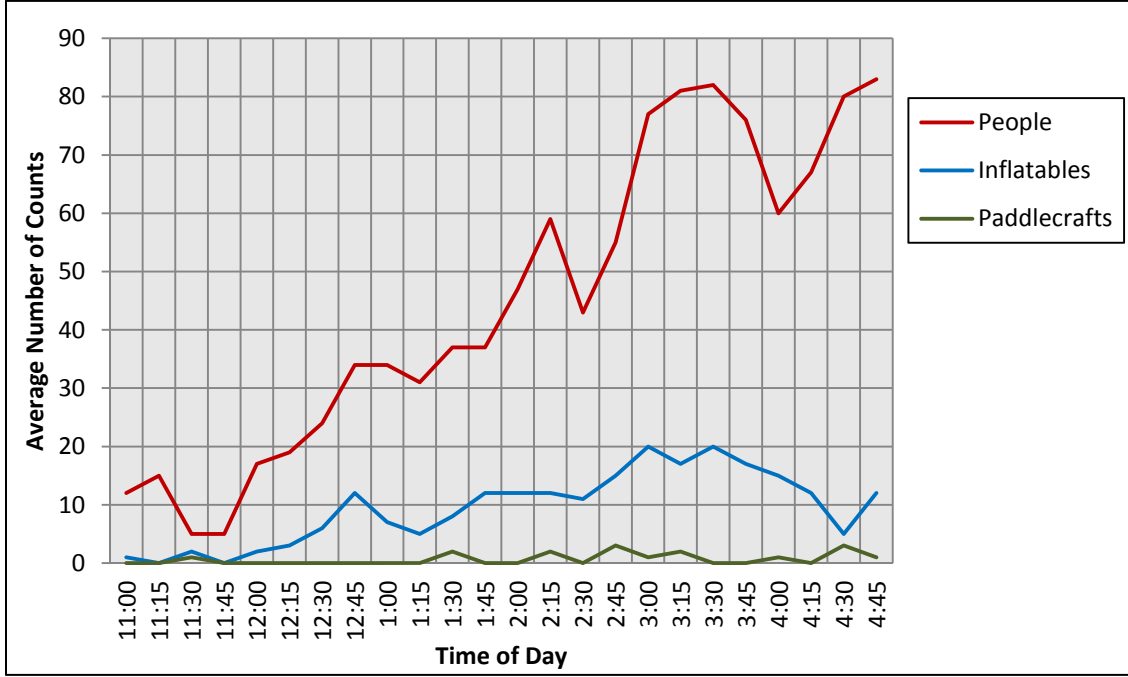
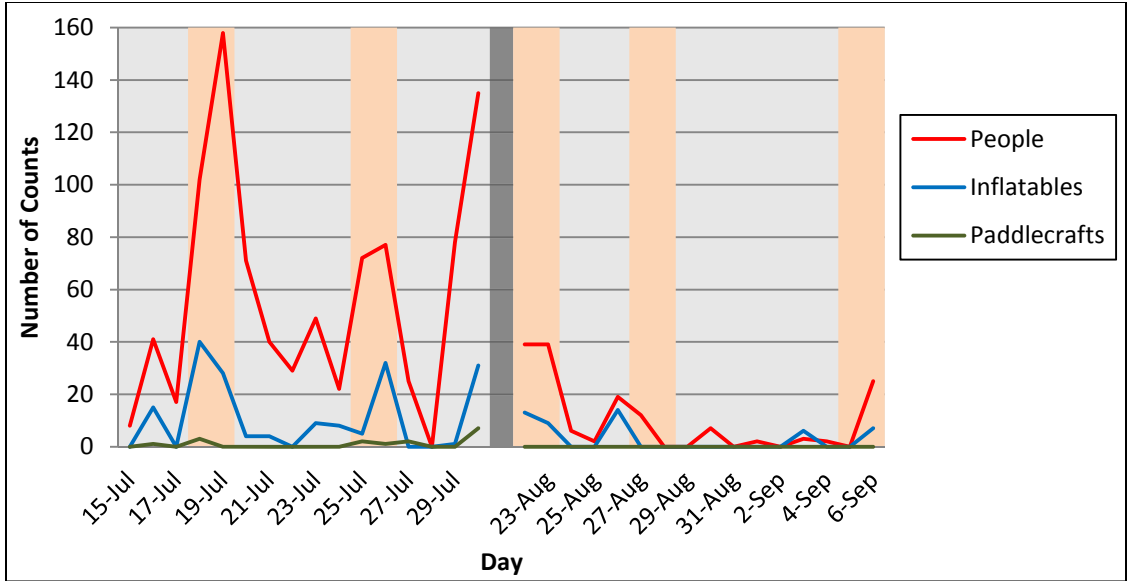


Priest Rapids Recreation Area (Swim Area)

Site Name: **Priest Rapids Recreation Area**

Amenities: **Swim Area**





APPENDIX D

Date: _____
Time of Day (24hr): _____
Site: _____

2015 Recreation User Survey

As a recreation provider along the Columbia River, Grant PUD is interested in hearing about your recreation visit to Priest Rapids or Wanapum Reservoirs. Your participation is important to us and will help us determine current and future recreation needs. Thank you for your participation.

1. How many people are in your vehicle today, including yourself? _____

2. What is your zip code? _____

3. Please indicate which of the following activities you are participating in on this trip (mark all that apply):

- Swimming/visiting the beach, Boating, Riding jetskis/waverunners, Photography, Wildlife Viewing, Other, Resting/relaxing, Picnicking, Attending a concert, Fishing, Visiting a dam, Camping, Waterskiing/tubing/wakeboarding, Hiking, Canoeing/kayaking/paddle boarding, Golf

4. Of the activities listed above, which is your primary activity on this trip? _____

5. What did you like the most about your visit to this recreation site?

6. What did you like the least about your visit to this recreation site?

7. How much time will you spend on your current trip?

_____ Number of hours OR Number of days, if 24 hours or more

8. If your current trip extends into two or more days, what type of overnight accommodations did you use on your trip? (mark all that apply)

- Campground (RV or tent) -> Location: _____
Rented cabin/condo/home/motel/hotel -> Location: _____
Your own home/property
Other (Please specify): _____

9. a. Did any of the following conditions adversely affect your trip? (mark all that apply)

- Strong winds
- Lack of shade from the sun
- Low water levels
- Lack of shelter from the weather
- Lack of ADA accessibility

b. If you checked any of the above conditions, describe how they affected your trip?

10. Grant PUD is interested in your opinion about the level of existing development and management at the reservoirs. Please indicate a response for any of the following facilities you used during your visit.

	Too high			About right				Too low		Don't know
Level of public recreation development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Number of restrooms/toilets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Quality of restrooms/toilets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Number of picnic or day use areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Quality of picnic or day use areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Amount of shoreline available for use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Number of boat launches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Quality of boat launches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Number of swim/sunbathing areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Quality of swim/sunbathing areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Number of hiking trails	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Quality of hiking trails	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Number of public docks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Quality of public docks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Number of campsites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Quality of campsites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Cost to use facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Quality of on-line campground reservation system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

11. Please indicate the extent that the following issues were problems for you during your visit today. (mark one response for each item)

	No Problem							Big Problem		Don't Know or Not Applicable
	→									
Litter around the reservoir shoreline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Adequate safety and security	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Adequate protection from the wind	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Adequate information/warnings provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Disruptive behavior by others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Other (please specify): _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

12. Help us understand crowding issues by answering the following questions. (mark one response for each item)

	Not at all Crowded		Slightly Crowded		Moderately Crowded		Extremely Crowded		Don't Know or Not Applicable	
How crowded did you feel today?	1	2	3	4	5	6	7	8	9	N/A
How crowded did you <u>expect</u> to feel today?	1	2	3	4	5	6	7	8	9	N/A

13 a. If you used the area shown in **photo A**, what is the maximum number of people you think could use the recreation site pictured at any one time without you feeling too crowded?

Number of people _____

b. What is the maximum number of people that you saw actually using the recreation site pictured at any one time during your visit today?

Number of people _____ OR Don't know or can't remember

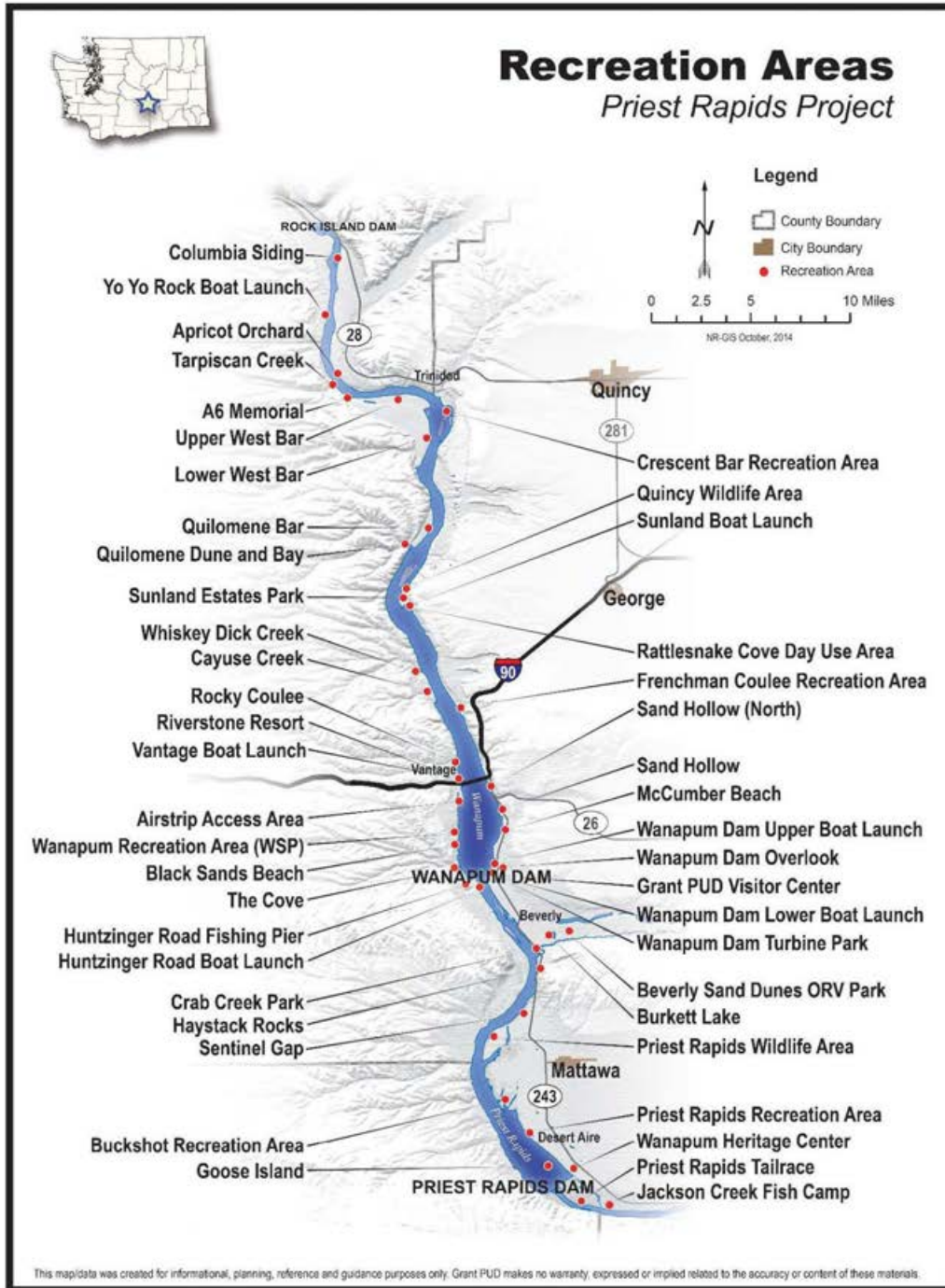
14. Please estimate how much money you and your party will spend TODAY while on this trip (e.g., fuel, lodging, restaurants, groceries, admissions, fees, outdoor gear, etc.).

\$ _____

15. If you could ask Grant PUD to change some things about the way they manage recreation at Wanapum and Priest Rapids reservoirs, what would you ask them to do?

Please complete the remaining questions only if you were on the water today (boating, fishing, etc.). If you were not on the water today, thank you for completing the survey!

16. What areas of the Priest Rapids/Wanapum reservoirs did you use today? Please mark a line on the map on the next page showing where you traveled on the water today, and place an 'X' at any locations where you stopped for more than 30 minutes



17. a. Did you have to wait to use a boat launch today?

Yes → How long did you wait? _____ minutes

No

b. How long of a wait to launch your boat is acceptable to you? _____ minutes

18. We would like to know how many boats you think could use the segments of the reservoirs that you used today without you feeling too crowded and unsafe. To help judge this, we have a series of photos that show different numbers of boats. Please look at these photos.

a. Please rate each photo by indicating how acceptable you think it is based on the number of boats shown. A rating of -4 means the number of boats is "very unacceptable", and a rating of +4 means the number of boats is "very acceptable". (Circle one number for each photograph.)

	Very Unacceptable					Very Acceptable			
Photo 1	-4	-3	-2	-1	0	+1	+2	+3	+4
Photo 2	-4	-3	-2	-1	0	+1	+2	+3	+4
Photo 3	-4	-3	-2	-1	0	+1	+2	+3	+4
Photo 4	-4	-3	-2	-1	0	+1	+2	+3	+4
Photo 5	-4	-3	-2	-1	0	+1	+2	+3	+4
Photo 6	-4	-3	-2	-1	0	+1	+2	+3	+4

b. Which photo shows the highest number of boats that should be allowed on the reservoir segments you used today? In other words, at what point should boats be restricted from using the reservoir because it is too crowded and unsafe? (If you think use should not be restricted, please indicate)

Photo number: _____

OR

None of the photos show a high enough number of boats to restrict use.

c. Which photo looks most like the number of boats you typically saw on the reservoir segments you used today?

Photo number: _____

We thank you for your time and input on this survey. If you have any further questions regarding this survey or the area in general, please feel free to contact Grant PUD at (509) 754-0500 or lands@grantpud.org.

Study Photos of Boat Density Referenced in the Survey



P
h
o
t
o
1



P
h
o
t
o
2



P
h
o
t
o
3



P
h
o
t
o
4



P
h
o
t
o
5



P
h
o
t
o
6

Study Photos Referenced in the Survey as “Photo A”



Buckshot Recreation Area



Crescent Bar Marina



Crescent Bar Off-Island Boat Launch



Crescent Bar Off-Island Campground



Crescent Bar On-Island Picnic Area



Crescent Bar On-Island Boat Launch



Beverly ORV Park – Dispersed Camping



Burkett Lake Trail



Frenchman Coulee Boat Launch and Picnic Area



Huntzinger Fishing Pier



Huntzinger Boat Launch



Jackson Creek Fish Camp Campground



PRRA Trail



PRRA Swim Area



PRRA Boat Launch



PRRA North Picnic Area



PRRA Picnic Area



Rattlesnake Cove Swim Area and Picnic Area



Rocky Coulee Campground



Rocky Coulee Picnic Area



Sand Hollow Campground



Sand Hollow Picnic Area (North)



Sand Hollow Picnic Area (South)



Sand Hollow Swim Area

a



Sunland Picnic Area



Sunland Boat Launch



The Cove Picnic Area



Wanapum Turbine Park Picnic Area



Vantage Boat Launch



Wanapum Dam Overlook



Wanapum Dam Lower Boat Launch



Wanapum Dam Upper Boat Launch



Wanapum Recreation Area (WSP) Boat Launch



Wanapum Recreation Area (WSP) Picnic Area



Wanapum Recreation Area (WSP) Swim Area

APPENDIX E

Example of a Recreational Use Assessment Form – Boat-Based Counts of Boat Density and Boat Types

Recreational Use Assessment Form – Boat-Based Counts of Boat Density and Boat Types

Observers: Chris Clarke, Brad Harshman **Start Time:** 10:20 **End Time:** 1:20 **Date:** 6/23/2015
Temperature: 85 **Wind speed at Wanapum Dam:** 10 mph **Precipitation:** No

	Management Unit													
	A		B		C		D		E		F		G	
	# Boats	# People	# Boats	# People	# Boats	# People	# Boats	# People	# Boats	# People	# Boats	# People	# Boats	# People
Motorboats														
<i>Fishing</i>	0	0	0	0	0	0	0	0	0	0	1	2	1	2
<i>Towing</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Other</i>	0	0	1	4	0	0	1	2	1	2	0	0	1	2
PWC														
<i>Towing</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Other</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-motorboat														
	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Instructions: Count the number of boats and number of people associated with those boats. Boat numbers should be tallied by boat types and management units, as shown above. Only count boats and associated people who are actively boating. This is defined as boats that are on the water and where another boat could reasonably navigate around it on all sides. People actively boating are those individuals clearly associated with boats previously described. Boats or people within a signed or marked non-wake zone at a specific site, other than the shoreline no-wake zone that exists on the entire reservoir, should not be counted since they are not considered to be actively boating. Boats or people not meeting these descriptions will instead be counted towards use of a shore-based amenity.

Definitions: A boat fishing is defined as a boat of any type actively fishing (e.g., with lines in the water). A towing boat is defined as a boat of any type towing a person for recreational purposes. A boat counted under the “other category” is defined as all boats not counted in the fishing or towing definitions. A non-motorboat is defined as a boat of any type without a motorized power source.

APPENDIX F

Example of a Recreational Use Assessment Form – Observer-Based Counts

Recreational Use Assessment Form – Observer-Based Counts at Amenities

Observer **Brad Harshman, Chris Clarke** Start Time **10:20** End Time **1:20** Date **6/23/2015** Period **Wan Boat Survey**

Site Name	FERC Amenity Type	# of Vehicles	# of Trailers	# of Powerboats	# of PWC	# of Paddle-craft	# of Inflatable-crafts	# People	# of Picnic Tables Occupied (if applicable)	# of Designated Parking Spaces Occupied (if applicable)	# of Campsites Occupied (if applicable)	# of Boats Waiting to Launch (if applicable)	# Marina Boat Slips Occupied (if Applicable)
Columbia Siding	Access Point	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
A6 Memorial	Informal Use Area (Boat In)	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Tarpiscan Creek	Hunting Area	1	0	0	0	0	0	1	N/A	N/A	N/A	N/A	N/A
Apricot Orchard Boat Launch	Access Point	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Apricot Orchard Boat Launch	Hunting Area	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Columbia Cliffs	Informal Use Area (Boat In)	0	0	2	1	2	0	0	N/A	N/A	N/A	N/A	N/A
Upper West Bar	Hunting Area	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Lower West Bar	Informal Use Area (Boat In)	0	N/A	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
CBRA On-Is.	Informal Use Area (Boat In)	N/A	N/A	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Quincy Wildlife Area	Access Point	N/A	N/A	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A

Note: Only count items within the boundaries of the formal FERC amenity. For example, only boats on land or pulled up to land should be counted.

Continued on next page!!!

Page 1 of 3

Recreational Use Assessment Form – Observer-Based Counts at Amenities

Observer **Brad Harshman, Chris Clarke** Start Time **10:20** End Time **1:20** Date **6/23/2015** Period **Wan Boat Survey**

Site Name	FERC Amenity Type	# of Vehicles	# of Trailers	# of Powerboats	# of PWC	# of Paddle-craft	# of Inflatable-crafts	# People	# of Picnic Tables Occupied (if applicable)	# of Designated Parking Spaces Occupied (if applicable)	# of Campsites Occupied (if applicable)	# of Boats Waiting to Launch (if applicable)	# Marina Boat Slips Occupied (if Applicable)
Sunland Shoreline	Access Point	0	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A
Quilomene Dune and Bay	Informal Use Area (Boat In)	0	0	2	1	0	0	7	N/A	N/A	N/A	N/A	N/A
Quilomene Dune and Bay	Dispersed Camp Area	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Quilomene Bar	Hunting Area	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Whiskey Dick Creek	Hunting Area	0	N/A	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Cayuse Creek	Hunting Area	0	N/A	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Riverstone Resort	Access Point	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Airstrip Access Area	Informal Use Area (Boat In)	N/A	N/A	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Sand Hollow (both southern bays)	Informal Use Area	N/A	N/A	0	0	0	0	16	N/A	N/A	N/A	N/A	N/A
Sand Hollow (North)	Access Point	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A

Note: Only count items within the boundaries of the formal FERC amenity. For example, only boats on land or pulled up to land should be counted.

Continued on next page!!!

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Recreational Use Assessment Form – Observer-Based Counts at Amenities

Observer **Brad Harshman, Chris Clarke** Start Time **10:20** End Time **1:20** Date **6/23/2015** Period **Wan Boat Survey**

Site Name	FERC Amenity Type	# of Vehicles	# of Trailers	# of Powerboats	# of PWC	# of Paddle-craft	# of Inflatable-crafts	# People	# of Picnic Tables Occupied (if applicable)	# of Designated Parking Spaces Occupied (if applicable)	# of Campsites Occupied (if applicable)	# of Boats Waiting to Launch (if applicable)	# Marina Boat Slips Occupied (if Applicable)
Black Sands Beach	Informal Use Area (Boat In)	N/A	N/A	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
McCumber Beach	Informal Use Area (Boat In)	N/A	N/A	1	0	0	0	3	N/A	N/A	N/A	N/A	N/A
Yo Yo Rock	Boat Launch	1	1	0	0	0	0	0	N/A	1	N/A	0	N/A

Note: Only count items within the boundaries of the formal FERC amenity. For example, only boats on land or pulled up to land should be counted.

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Recreational Use Assessment Form – Observer-Based Counts at Amenities

Observer **Brad Harshman, Chris Clarke** Start Time **10:20** End Time **1:20** Date **6/23/2015** Period **Priest Boat Survey**

Site Name	FERC Amenity Type	# of Vehicles	# of Trailers	# of Powerboats	# of PWC	# of Paddle-craft	# of Inflatable-crafts	# People	# of Picnic Tables Occupied (if applicable)	# of Designated Parking Spaces Occupied (if applicable)	# of Campsites Occupied (if applicable)	# of Boats Waiting to Launch (if applicable)	# Marina Boat Slips Occupied (if Applicable)
Crab Creek Park	Access Point	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Haystack Rocks	Access Point	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Sentinel Gap	Access Point	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Priest Rapids Wildlife Area	Hunting Area	N/A	N/A	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
Goose Island	Hunting Area	N/A	N/A	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A

Note: Only count items within the boundaries of the formal FERC amenity. For example, only boats on land or pulled up to land should be counted