

APPENDIX D
DATA SUMMARIES AND OTHER SUPPLEMENTAL ANALYSES

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This appendix presents additional summary tables and other supplemental analyses of the camera data. These summaries were used to help with the quality assurance and quality control (QA/QC) process, to inform the primary study requirements, and to provide additional insight into the data (beyond the study requirements).

1.0 MODEL PERFORMANCE AND DATA VALIDATION

Using artificial intelligence (AI) to analyze photographs and record target objects is a novel data collection method that is rapidly evolving as AI capabilities become more robust over time. To validate the use of the AI tool (Google Gemini 1.5 Pro) used for the camera study, Southern California Edison (SCE) employed a QA/QC process that involved multiple layers of data validation. These validation steps and outcomes are described below.

During the QA/QC process, the AI tool flagged about 12 percent of all photographs with a Confidence Score (CS) of less than 90 (Section 4.4.4, *Performance Validation*, of the Camera Study Addendum provides a description of the confidence scoring process). In these photographs, the AI tool recognized the target objects but may have had difficulty categorizing and/or quantifying the number of objects. SCE manually reviewed a subset of these photographs (about 5 percent of photographs with a CS lower than 90). In this subset of photographs, SCE compared the manual count of people, vehicles, and watercraft to the AI output. Three patterns emerged from this review of photographs with a low CS:

1. The AI tool occasionally miscategorized vehicles or watercraft but correctly quantified the total number of these objects. For example, the AI output may have categorized a pickup truck with a topper as a sport utility vehicle or an inflatable kayak as a small raft. In both examples, while the vehicle and watercraft types may have been miscategorized, the total number of vehicles and watercraft were correct.
2. The AI tool periodically counted non-target objects as target objects; that is, it recognized an object in a photograph but incorrectly identified this object as a target object (person, vehicle, and watercraft). For example, the AI tool may have recognized and counted a dumpster in a parking area as a vehicle or identified a car-top cargo holder and recorded it as a small kayak. This resulted in slight overcounts in the target objects.
3. The AI tool sporadically miscounted the number of objects in some photographs. These miscounts tended to be overcounts rather than under-counts although both types of miscounts were present in the manually reviewed subset. For example, the AI tool may have identified and counted 12 vehicles when there were only 10 in a parking area, or it may have identified and counted 5 kayaks on the river when there were only 4. These miscounts typically were small (1 to 2 objects more or less than in the actual photograph) rather than large (greater than 2).

During the QA/QC process, SCE made any necessary updates to the data from the manual review of the subset of photographs with low CS (e.g., correcting

misidentifications and/or miscounts) but did not make global adjustments or broad recalibrations to the full dataset since small discrepancies in individual data points would have negligible effects on the overall outcomes of the study. While a 5-minute time interval on the photos provides a high level of coverage of the river access sites and a correspondingly accurate data record, it is not a census of all recreational users on the river. As noted in the Federal Energy Regulatory Commission (FERC)-approved Study Plan, the findings are intended to characterize relative use patterns, temporal trends, and comparative levels of activity rather than precise counts of individual recreationists. Within this appendix, additional statistical measures of variability (standard deviations, confidence intervals) that help describe and frame the inherent dispersion in data derived from a sampling process are provided below.

In total, SCE manually reviewed more than 30,000 photographs, including the subset of photographs with low CS, to compare the actual number of people, vehicles, and watercraft with the AI output. The manually reviewed photographs represent approximately 3.5 percent of all photographs captured during the year-long camera study. As noted in Section 4.4.4., *Performance Validation*, of the Camera Study Addendum, this subset of photographs was randomly drawn from photographs with inconsistent outputs or a CS of less than 90 percent (see above), as well as randomly selected periods during peak summer months including when objects were and were not detected.

In the subset of photographs that were manually reviewed, about 44 percent required no adjustments to the AI-generated object categories or counts (i.e., the AI model accurately categorized and counted target objects). The remaining 56 percent of photographs required minor corrections to the AI-generated object categories or counts. This outcome was not unexpected given the deliberate focus on lower-confidence and visually complex images. The majority of adjustments involved small overcounts or classification errors related to people, vehicles, or watercraft, rather than substantive discrepancies affecting overall use patterns or temporal trends (Section 4.4.4, *Performance Validation*, of the Camera Study Addendum). These corrections were largely attributed to known, site-specific factors that emerged during the manual review including surface water glare, shaded/darker areas, partially obscured visitors, and fixed infrastructure elements within the camera views. The cameras exhibiting higher correction frequencies were those that captured river-oriented views or parking areas with visual features that are commonly recognized as challenging for automated image recognition tools. Example photographs that were manually validated, including instances where AI correctly identified and counted objects, are provided in Appendix E, *Selected Photographs from Camera Study*, of the Camera Study Addendum.

A higher frequency of adjustments was associated with a limited number of camera locations, including Camera 6 (Calkins Flat Dispersed Camping), Camera 7 (Chamise Gorge Run), Camera 13 (Riverkern Beach Picnic Site), and Camera 15/17 (Kern River No. 3 [KR3] Powerhouse North). Observations from the QA/QC process identified several recurring conditions contributing to classification uncertainty at these locations, including:

- For camera locations that captured river views, surface water glare and other objects (rocks) in the river caused false positives for watercraft (i.e., glare or a rock was

recorded as a watercraft by the AI tool). This was particularly an issue for the three river view cameras (Cameras 7, 9 and 14).

- River-side shade structures (Easy-ups) were often mischaracterized as watercraft by the AI tool (primarily at Cameras 6 and 13), particularly during the summer months.
- Fixed (or seasonal) infrastructure elements in some parking areas, such as dumpsters or portable restrooms, were often mischaracterized as vehicles by the AI tool.
- The AI tool occasionally missed people or boats that were partially or wholly obscured but that were visible in adjacent timestamp photographs (e.g., four boats were observed at 1:00 p.m., three boats at 1:05 p.m., and then four boats again at 1:10 p.m.).
- Under-counting people occurred more frequently when large, dense groups of people were present or when vegetation and/or shade partially obscured people.

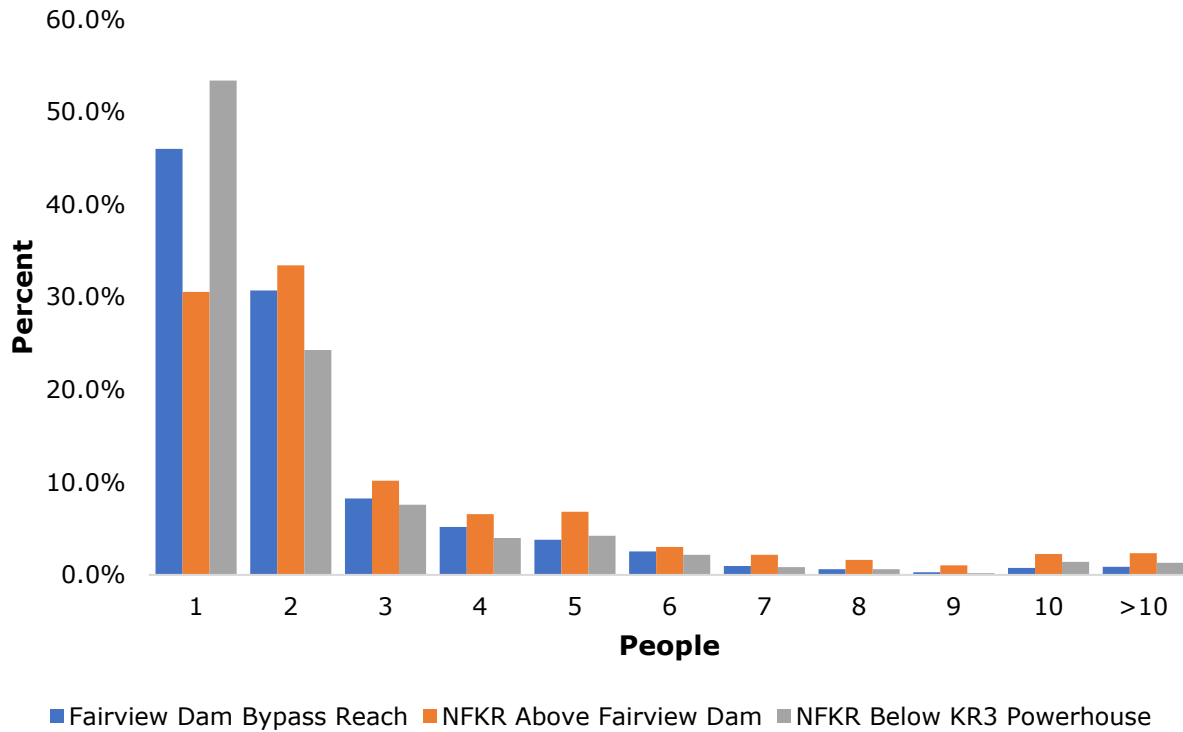
As noted previously, SCE made minor corrections to the specific instances of AI-generated data to account for any discrepancies identified during the manual validation process, including the recurring conditions identified above. However, larger-scale adjustments or recalibrations were avoided since the outcomes of the camera study are intended to characterize relative use patterns, temporal trends, and comparative levels of activity to inform the license conditions rather than precise counts of individual recreationists. Refer below for descriptive statistics and measures that help describe and frame the inherent dispersion in data derived from a sampling process (such as the camera study).

The QA/QC process demonstrates that AI-assisted photo analysis is most effective when paired with targeted human review, particularly in visually complex recreation settings.

2.0 FREQUENCY DISTRIBUTIONS

Frequency distributions describe the most frequently observed number of people, vehicles, and watercraft in the photographs. Figure 1 displays the frequency distribution of people in the photographs captured at the river access sites in the Fairview Dam Bypass Reach, above the Fairview Dam, and below the KR3 Powerhouse. Figure 1 only includes the frequency distribution of people when people were present/recorded onsite. The majority of photographs did not have any people present, including:

- 90.7 percent of photographs from the Fairview Dam Bypass Reach
- 89.9 percent of photographs from above Fairview Dam
- 86.8 percent of photographs from below the KR3 Powerhouse

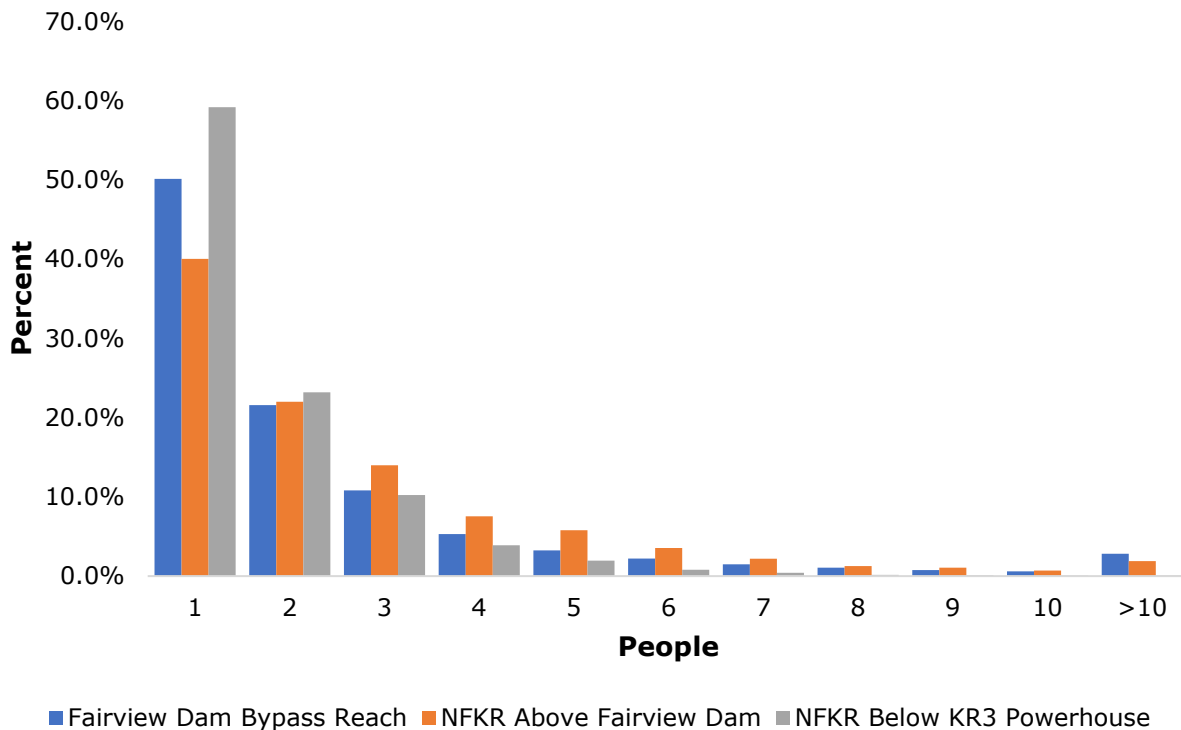


KR3 = Kern River No. 3; NFKR = North Fork Kern River

Figure 1. Frequency Distribution of Recorded People at NFKR Locations.

Figure 2 displays the frequency distribution of vehicles (all types) in the photographs captured at the river access sites. Similar to Figure 1, this figure only includes the frequency distribution of vehicles when vehicles were present/recorded onsite. Slight majority of the photographs did not have any vehicles present (see below), except for at the river access sites above Fairview Dam.

- 57.0 percent of photographs from the Fairview Dam Bypass Reach
- 44.7 percent of photographs from above Fairview Dam
- 50.9 percent of photographs from below the KR3 Powerhouse

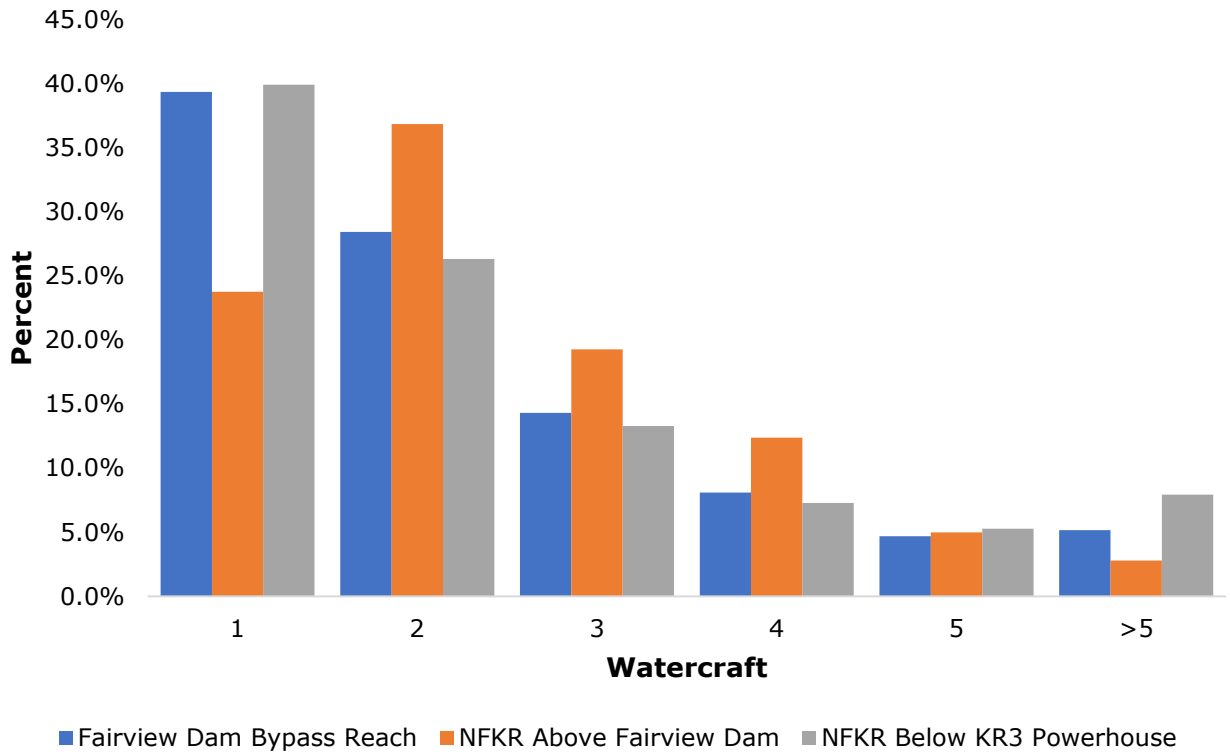


KR3 = Kern River No. 3; NFKR = North Fork Kern River

Figure 2. Frequency Distribution of Recorded Vehicles at NFKR Locations.

Figure 3 displays the frequency distribution of watercraft (all types) in the photographs captured at the river access sites. Again, most photographs did not have any watercraft, including:

- 98.5 percent of photographs from the Fairview Dam Bypass Reach
- 99.4 percent of photographs from above Fairview Dam
- 96.6 percent of photographs from below the KR3 Powerhouse



KR3 = Kern River No. 3; NFKR = North Fork Kern River

Figure 3. Frequency Distribution of Recorded Watercraft at NFKR Locations.

3.0 PEOPLE COUNTS

Table 1 lists the percentage of photographs from the year-long study that included at least one person.

Table 1. Percent of Photographs at each River Access Site with People

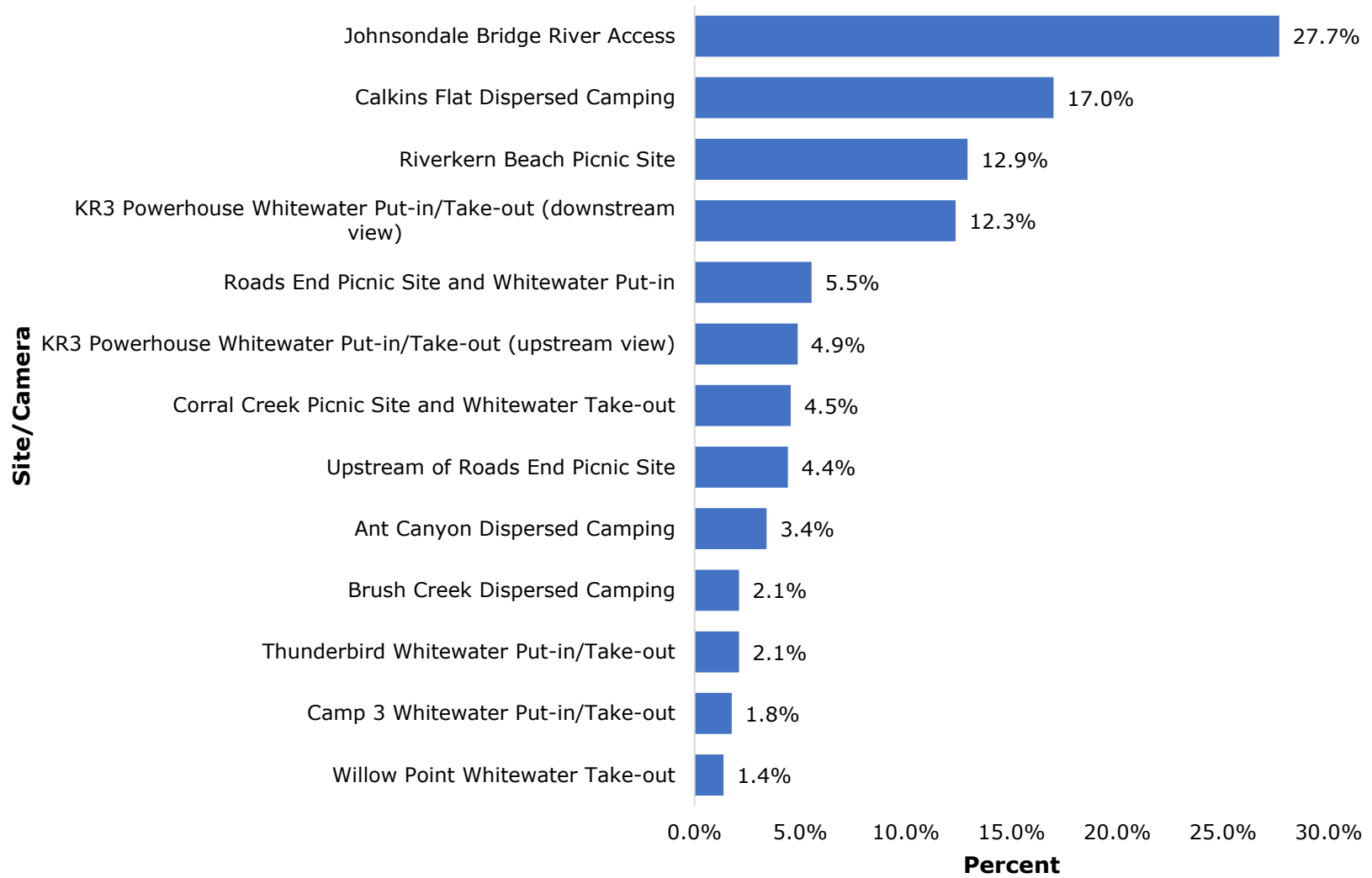
River Access Site	People ^a
Fairview Dam Bypass Reach	
Upstream of Roads End Picnic Site	8.5%
Roads End Picnic Site and Whitewater Put-in	9.8%
Calkins Flat Dispersed Camping	21.1%
Ant Canyon Dispersed Camping	5.5%
Corral Creek Picnic Site and Whitewater Take-out	7.3%
Thunderbird Whitewater Put-in/Take-out	4.0%
Camp 3 Whitewater Put-in/Take-out	3.7%
Riverkern Beach Picnic Site	14.5%
Above Fairview Dam	
Johnsondale Bridge River Access	26.8%
Brush Creek Dispersed Camping	3.6%
Willow Point Whitewater Take-out	2.7%
Below KR3 Powerhouse	
KR3 Powerhouse Whitewater Put-in/Take-out (North-upstream view)	8.2%
KR3 Powerhouse Whitewater Put-in/Take-out (South-downstream view)	18.5%

KR3 = Kern River No. 3

Notes:

^a Indicates the percentage of photographs with at least one observed person.

Figure 4 ranks the river access sites (camera locations) by the relative percentage of people recorded during the year-long camera study.



KR3 = Kern River No. 3

Figure 4. Site Rankings by Relative Percent of Annual People Observations.

3.1. FAIRVIEW DAM BYPASS REACH

Table 2 provides the range of values (minimum and maximum), as well as the average, standard deviation (SD), and 95 percent confidence interval (CI) for people recorded at each river access site in the Fairview Dam Bypass Reach. These summary statistics include all photographs collected during the year-long study even if they did not have any people. Table 3 provides the same information but limited to those times when people were recorded as being on site (i.e., there was at least one person in the photograph).

Table 2. People in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	0	13	0.14	0.57	0.14	0.15
Roads End Picnic Site and Whitewater Put-in	0	27	0.19	0.82	0.18	0.19
Calkins Flat Dispersed Camping	0	20	0.55	1.42	0.53	0.56
Ant Canyon Dispersed Camping	0	17	0.11	0.58	0.10	0.11
Corral Creek Picnic Site and Whitewater Take-out	0	18	0.15	0.69	0.14	0.15
Thunderbird Whitewater Put-in/Take-out	0	12	0.07	0.40	0.06	0.07
Camp 3 Whitewater Put-in/Take-out	0	20	0.06	0.35	0.05	0.06
Riverkern Beach Picnic Site	0	48	0.43	1.65	0.41	0.44
All River Access Sites	0	48	0.21	0.94	0.21	0.21

CI = confidence interval; SD = standard deviation

Table 3. People Occupancy Pattern Along the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	1	13	1.70	1.1	1.66	1.73
Roads End Picnic Site and Whitewater Put-in	1	27	1.90	1.9	1.84	1.95
Calkins Flat Dispersed Camping	1	20	2.59	2.1	2.55	2.63
Ant Canyon Dispersed Camping	1	17	2.00	1.5	1.94	2.06
Corral Creek Picnic Site and Whitewater Take-out	1	18	2.04	1.6	1.98	2.09

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Thunderbird Whitewater Put-in/Take-out	1	12	1.69	1.1	1.64	1.74
Camp 3 Whitewater Put-in/Take-out	1	20	1.54	1.0	1.49	1.58
Riverkern Beach Picnic Site	1	48	2.95	3.4	2.87	3.02
All River Access Sites	1	48	2.27	2.2	2.25	2.29

CI = confidence interval; SD = standard deviation

Table 4 and Table 5 provide a summary of the total people counts (all values including zeros) and the occupancy pattern (only when people values are equal to or greater than one) at the river access sites along the Fairview Dam Bypass Reach by season (peak whitewater boating season-April 1 through July 31-and the rest of the year-August 1 through March 31, respectively). Table 6 and Table 7 provide a similar summary but for weekdays and weekend days at the river access sites along the Fairview Dam Bypass Reach. For purposes of this summary, weekdays include Monday through Thursday and weekend days include Friday through Sunday.

Table 4. Seasonal Summary of People in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Peak Whitewater Boating Season (April -July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	0	13	0.25	0.76	0.24	0.26	0	10	0.09	0.44	0.09	0.10
Roads End Picnic Site and Whitewater Put-in	0	27	0.25	1.07	0.24	0.27	0	26	0.15	0.65	0.14	0.16
Calkins Flat Dispersed Camping	0	15	0.72	1.50	0.69	0.74	0	20	0.46	1.37	0.45	0.48
Ant Canyon Dispersed Camping	0	11	0.11	0.53	0.10	0.12	0	17	0.11	0.61	0.10	0.11
Corral Creek Picnic Site and Whitewater Take-out	0	18	0.28	0.94	0.26	0.29	0	13	0.08	0.49	0.08	0.09
Thunderbird Whitewater Put-in/Take-out	0	12	0.10	0.51	0.09	0.11	0	11	0.05	0.33	0.05	0.05
Camp 3 Whitewater Put-in/Take-out	0	20	0.06	0.43	0.06	0.07	0	8	0.05	0.31	0.05	0.06
Riverkern Beach Picnic Site	0	48	0.77	2.37	0.73	0.80	0	40	0.24	1.02	0.23	0.26
All River Access Sites	0	48	0.32	1.21	0.31	0.32	0	40	0.15	0.75	0.15	0.16

CI = confidence interval; SD = standard deviation

Table 5. Seasonal Occupancy Pattern (People) in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Whitewater Boating Season (April - July)						Rest of Year (August – March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	1	13	1.76	1.16	1.72	1.81	1	10	1.61	1.02	1.57	1.66
Roads End Picnic Site and Whitewater Put-in	1	27	2.04	2.36	1.94	2.14	1	26	1.78	1.45	1.73	1.84
Calkins Flat Dispersed Camping	1	15	2.51	1.83	2.46	2.56	1	20	2.66	2.24	2.60	2.72
Ant Canyon Dispersed Camping	1	11	1.92	1.13	1.85	1.99	1	17	2.04	1.73	1.97	2.12
Corral Creek Picnic Site and Whitewater Take-out	1	18	2.12	1.71	2.05	2.19	1	13	1.90	1.44	1.83	1.98
Thunderbird Whitewater Put-in/Take-out	1	12	1.78	1.24	1.70	1.85	1	11	1.60	1.01	1.54	1.66
Camp 3 Whitewater Put-in/Take-out	1	20	1.85	1.44	1.73	1.96	1	8	1.40	0.75	1.36	1.44
Riverkern Beach Picnic Site	1	48	3.74	4.05	3.61	3.87	1	40	2.17	2.27	2.10	2.25
All River Access Sites	1	48	2.46	2.48	2.42	2.49	1	40	2.10	1.88	2.07	2.12

CI = confidence interval; SD = standard deviation

Table 6. Type of Day Summary of People in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	0	9	0.08	0.40	0.07	0.08	0	13	0.23	0.73	0.22	0.24
Roads End Picnic Site and Whitewater Put-in	0	10	0.12	0.51	0.11	0.12	0	27	0.27	1.09	0.26	0.29
Calkins Flat Dispersed Camping	0	17	0.32	1.01	0.30	0.33	0	20	0.85	1.77	0.82	0.87
Ant Canyon Dispersed Camping	0	11	0.05	0.34	0.05	0.05	0	17	0.19	0.78	0.18	0.20
Corral Creek Picnic Site and Whitewater Take-out	0	18	0.10	0.53	0.09	0.10	0	17	0.22	0.84	0.21	0.23
Thunderbird Whitewater Put-in/Take-out	0	11	0.04	0.31	0.04	0.05	0	12	0.10	0.49	0.09	0.11
Camp 3 Whitewater Put-in/Take-out	0	12	0.04	0.29	0.04	0.05	0	20	0.08	0.42	0.07	0.08
Riverkern Beach Picnic Site	0	41	0.25	1.17	0.23	0.26	0	48	0.67	2.10	0.64	0.69
All River Access Sites	0	41	0.12	0.66	0.12	0.13	0	48	0.32	1.20	0.32	0.33

CI = confidence interval; SD = standard deviation

Table 7. Type of Day Occupancy Pattern (People) in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	1	9	1.54	0.95	1.50	1.59	1	13	1.77	1.17	1.73	1.82
Roads End Picnic Site and Whitewater Put-in	1	10	1.62	1.07	1.57	1.66	1	27	2.10	2.31	2.01	2.18
Calkins Flat Dispersed Camping	1	17	2.21	1.73	2.16	2.27	1	20	2.83	2.21	2.78	2.88
Ant Canyon Dispersed Camping	1	11	1.72	1.07	1.64	1.79	1	17	2.12	1.69	2.05	2.20
Corral Creek Picnic Site and Whitewater Take-out	1	18	1.88	1.50	1.80	1.96	1	17	2.14	1.68	2.07	2.21
Thunderbird Whitewater Put-in/Take-out	1	11	1.66	1.09	1.58	1.73	1	12	1.70	1.16	1.64	1.77
Camp 3 Whitewater Put-in/Take-out	1	12	1.44	0.93	1.38	1.50	1	20	1.62	1.11	1.55	1.69
Riverkern Beach Picnic Site	1	41	2.42	2.85	2.32	2.53	1	48	3.29	3.62	3.19	3.40
All River Access Sites	1	41	1.97	1.81	1.94	2.00	1	48	2.46	2.38	2.43	2.49

CI = confidence interval; SD = standard deviation

3.2. NFKR ABOVE FAIRVIEW DAM

Table 8 provides the range of values (minimum and maximum), as well as the average, SD, and 95 percent CI for people recorded at the three river access sites above Fairview Dam. Table 9 provides the same information but limited to those times when people were recorded as being on site.

Table 8. People Above Fairview Dam – Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	0	53	0.89	2.19	0.87	0.91
Brush Creek Dispersed Camping	0	20	0.07	0.44	0.06	0.07
Willow Point Whitewater Take-out	0	10	0.04	0.31	0.04	0.05
All River Access Sites	0	53	0.34	1.36	0.33	0.34

CI = confidence interval; SD = standard deviation

Table 9. People Occupancy Pattern Above Fairview Dam – Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	1	53	3.31	3.15	3.25	3.36
Brush Creek Dispersed Camping	1	20	1.92	1.36	1.85	1.98
Willow Point Whitewater Take-out	1	10	1.65	1.00	1.60	1.70
All River Access Sites	1	53	3.03	2.94	2.98	3.07

CI = confidence interval; SD = standard deviation

A seasonal summary of the total people counts (all values including zeros) and the occupancy pattern (only when people values are equal to or greater than one) at the river access sites above Fairview Dam Bypass Reach is provided in Table 10 and Table 11, respectively. Table 12 and Table 13 provide a similar summary but for weekdays and weekend days at the river access sites above Fairview Dam.

Table 10. Seasonal Summary of People above Fairview Dam – Descriptive Statistics

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	0	34	1.30	2.69	1.27	1.33	0	53	0.68	1.86	0.65	0.70
Brush Creek Dispersed Camping	0	20	0.06	0.43	0.06	0.07	0	13	0.07	0.44	0.06	0.08
Willow Point Whitewater Take-out	0	10	0.05	0.35	0.05	0.05	0	8	0.04	0.29	0.04	0.05
All River Access Sites	0	34	0.47	1.69	0.46	0.48	0	53	0.27	1.16	0.26	0.28

CI = confidence interval; SD = standard deviation

Table 11. Seasonal Occupancy Pattern (People) above Fairview Dam – Descriptive Statistics

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	1	34	3.79	3.41	3.70	3.87	1	53	2.95	2.88	2.88	3.01
Brush Creek Dispersed Camping	1	20	1.88	1.43	1.76	2.00	1	13	1.93	1.32	1.86	2.01
Willow Point Whitewater Take-out	1	10	1.78	1.20	1.67	1.89	1	8	1.58	0.86	1.52	1.64
All River Access Sites	1	34	3.49	3.26	3.42	3.57	1	53	2.70	2.66	2.65	2.75

CI = confidence interval; SD = standard deviation

Table 12. Type of Day Summary of People above Fairview Dam – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	0	34	0.50	1.45	0.48	0.52	0	53	1.40	2.81	1.36	1.43
Brush Creek Dispersed Camping	0	20	0.05	0.36	0.04	0.05	0	13	0.10	0.52	0.09	0.11
Willow Point Whitewater Take-out	0	10	0.03	0.23	0.02	0.03	0	8	0.07	0.40	0.06	0.07
All River Access Sites	0	34	0.19	0.90	0.19	0.20	0	53	0.52	1.78	0.51	0.54

CI = confidence interval; SD = standard deviation

Table 13. Type of Day Occupancy Pattern (People) above Fairview Dam – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	1	34	2.62	2.33	2.56	2.69	1	53	3.77	3.52	3.69	3.84
Brush Creek Dispersed Camping	1	20	1.87	1.39	1.76	1.97	1	13	1.95	1.34	1.87	2.03
Willow Point Whitewater Take-out	1	10	1.47	0.91	1.39	1.55	1	8	1.75	1.03	1.68	1.82
All River Access Sites	1	34	2.46	2.20	2.41	2.51	1	53	3.40	3.29	3.34	3.46

CI = confidence interval; SD = standard deviation

3.3. NFKR BELOW THE KR3 POWERHOUSE

Table 14 provides the range of values (minimum and maximum), as well as the average, SD, and 95 percent CI for people recorded at the KR3 Powerhouse Whitewater Put-in/Take-out. Summary statistics are provided for each camera (upstream view and downstream view, as well as the site as a whole) Table 15 provides the same information but limited to those times when people were recorded as being on site.

Table 14. People below the KR3 Powerhouse – Descriptive Statistics

Camera/Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	0	20	0.16	0.67	0.15	0.16
Camera 16/18 (South-downstream view)	0	31	0.42	1.38	0.40	0.43
Combined KR3 Powerhouse Whitewater Put-in/Take-out	0	0	0.28	1.09	0.28	0.29

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 15. People Occupancy Pattern below the KR3 Powerhouse – Descriptive Statistics

Camera/Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	1	20	1.90	1.46	1.85	1.94
Camera 16/18 (South-downstream view)	1	31	2.24	2.50	2.19	2.29
Combined KR3 Powerhouse Whitewater Put-in/Take-out	1	31	2.13	2.23	2.09	2.17

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 16 and Table 17 provide a seasonal summary of the total people counts (all values including zeros) and the occupancy pattern (only when people values are equal to or greater than one) at the river access site below the KR3 Powerhouse. Table 18 and Table 19 provide a similar summary but for weekdays and weekend days at the river access site below the KR3 Powerhouse.

Table 16. Seasonal Summary of People below the KR3 Powerhouse – Descriptive Statistics

Camera/Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	0	20	0.22	0.88	0.21	0.24	0	14	0.12	0.52	0.12	0.13
Camera 16/18 (South-downstream view)	0	31	0.67	1.99	0.65	0.70	0	21	0.27	0.87	0.26	0.28
Combined KR3 Powerhouse Whitewater Put-in/Take-out	0	31	0.45	1.55	0.43	0.47	0	21	0.19	0.71	0.19	0.20

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 17. Seasonal Occupancy Pattern (People) below the KR3 Powerhouse – Descriptive Statistics

Camera/Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	1	20	2.13	1.83	2.05	2.22	1	14	1.72	1.07	1.68	1.76
Camera 16/18 (South-downstream view)	1	31	2.98	3.25	2.88	3.08	1	21	1.68	1.50	1.64	1.72
Combined KR3 Powerhouse Whitewater Put-in/Take-out	1	31	2.71	2.90	2.63	2.78	1	21	1.69	1.38	1.66	1.72

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 18. Type of Day Summary of People below the KR3 Powerhouse – Descriptive Statistics

Camera/Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	0	18	0.09	0.49	0.09	0.10	0	20	0.24	0.84	0.23	0.25
Camera 16/18 (South-downstream view)	0	31	0.30	1.09	0.28	0.31	0	30	0.57	1.69	0.55	0.60
Combined KR3 Powerhouse Whitewater Put-in/Take-out	0	31	0.19	0.84	0.19	0.20	0	30	0.40	1.33	0.39	0.41

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 19. Type of Day Occupancy Pattern (People) below the KR3 Powerhouse – Descriptive Statistics

Camera/Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	1	18	1.70	1.27	1.64	1.76	1	20	2.02	1.55	1.96	2.08
Camera 16/18 (South-downstream view)	1	31	1.89	2.12	1.82	1.95	1	30	2.57	2.77	2.49	2.65
Combined KR3 Powerhouse Whitewater Put-in/Take-out	1	31	1.84	1.93	1.79	1.88	1	30	2.37	2.42	2.32	2.43

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

4.0 VEHICLE COUNTS

Table 20 lists the percentage of photographs from the year-long study that included at least one vehicle.

Table 20. Percent of Photographs at each River Access Site with Vehicles

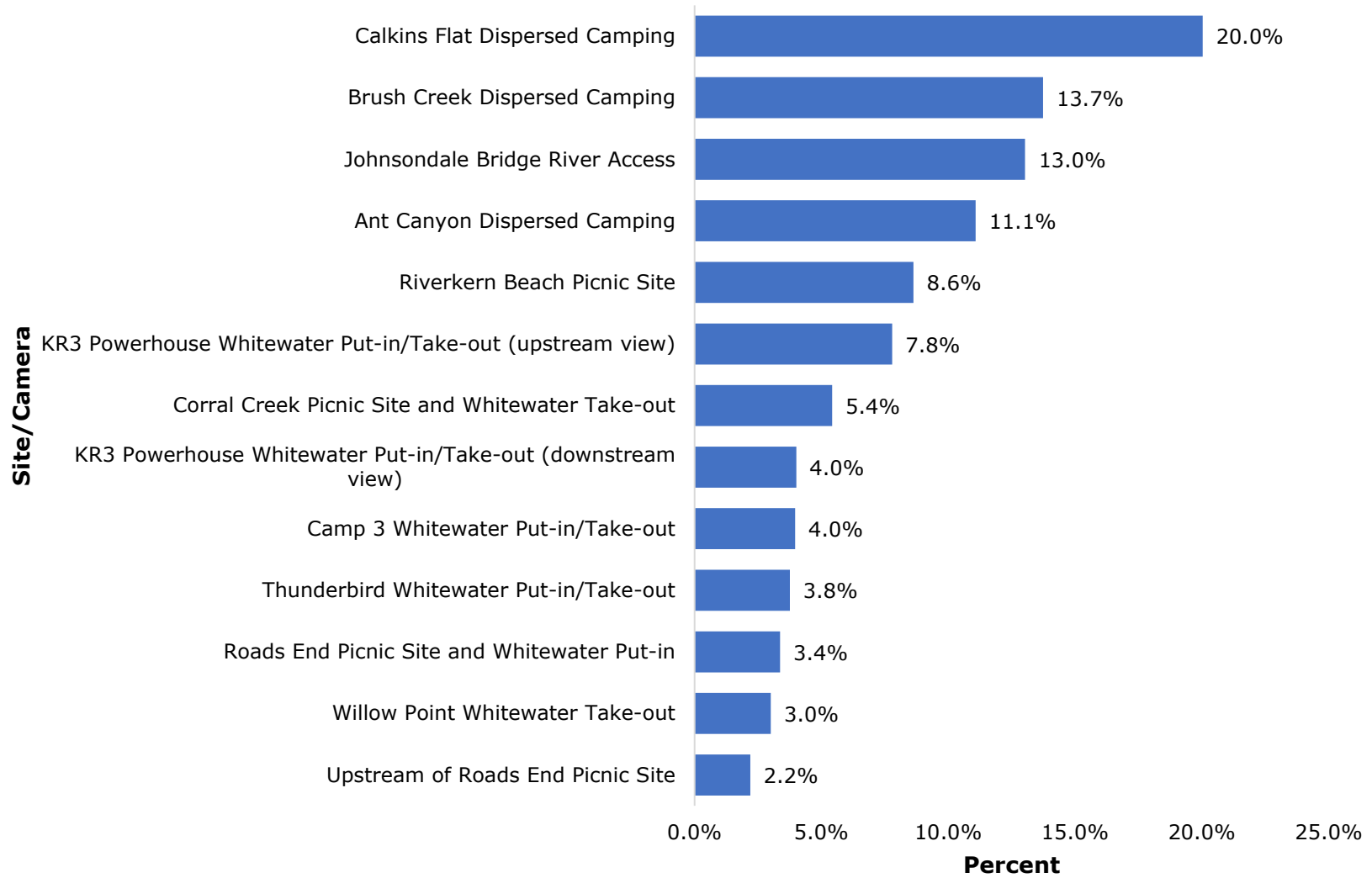
River Access Site	Vehicles ^a
Fairview Dam Bypass Reach	
Upstream of Roads End Picnic Site	25.0%
Roads End Picnic Site and Whitewater Put-in	31.8%
Calkins Flat Dispersed Camping	68.4%
Ant Canyon Dispersed Camping	55.6%
Corral Creek Picnic Site and Whitewater Take-out	33.4%
Thunderbird Whitewater Put-in/Take-out	35.1%
Camp 3 Whitewater Put-in/Take-out	37.6%
Riverkern Beach Picnic Site	56.8%
Above Fairview Dam	
Johnsondale Bridge River Access	67.3%
Brush Creek Dispersed Camping	68.4%
Willow Point Whitewater Take-out	30.0%
Below KR3 Powerhouse	
KR3 Powerhouse Whitewater Put-in/Take-out (North-upstream view)	60.3%
KR3 Powerhouse Whitewater Put-in/Take-out (South-downstream view)	37.2%

KR3 = Kern River No. 3

Notes:

^a Indicates the percentage of photographs with at least one recorded vehicle.

Figure 5 ranks the river access sites (camera locations) by the relative percentage of vehicles (all types) recorded during the year-long camera study.



KR3 = Kern River No. 3

Figure 5. Site Rankings by Relative Percent of Annual Vehicle Counts.

Fairview Dam Bypass Reach

Table 21 lists the relative percentage of vehicle types at each of the river access sites.

Table 21. Relative Percentage of Vehicle Types at River Access Sites in the Fairview Dam Bypass Reach

Site	Sedans	SUVs	Trucks	Vans	Buses	Other ^a
Upstream of Roads End Picnic Site	15.9%	39.9%	39.3%	4.8%	0.0%	0.1%
Roads End Picnic Site and Whitewater Put-in	20.2%	38.5%	36.4%	4.6%	0.3%	0.0%
Calkins Flat Dispersed Camping	21.3%	33.2%	37.3%	8.1%	0.0%	0.1%
Ant Canyon Dispersed Camping	20.0%	31.2%	29.3%	7.4%	0.1%	12.0%
Corral Creek Picnic Site and Whitewater Take-out	21.6%	37.1%	36.7%	4.6%	0.0%	0.0%
Thunderbird Whitewater Put-in/Take-out	24.0%	33.0%	34.4%	8.1%	0.5%	0.0%
Camp 3 Whitewater Put-in/Take-out	24.4%	35.7%	28.9%	4.7%	0.6%	5.7%
Riverkern Beach Picnic Site	29.2%	26.8%	28.8%	5.1%	1.3%	8.8%
All River Access Sites	22.4%	33.0%	33.7%	6.6%	0.3%	4.0%

AI = artificial intelligence; SUV = sport utility vehicle

Notes:

^a Based on a review of select photographs, trailers were most commonly categorized by the AI tool as other vehicles. However, at the Ant Canyon Dispersed Camping river access site, dumpsters and portable toilets in the parking lot were consistently recorded as other vehicles by the AI tool.

Table 22 provides the range of values (minimum and maximum), as well as the average, SD, and 95 percent CI for vehicles recorded at each river access site in the Fairview Dam Bypass Reach. Table 23 provides the same information but limited to those times when vehicles were recorded as being on site. For summary purposes, these vehicle summary tables and others do not differentiate between vehicle types.

Table 22. Vehicles in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	0	8	0.3	0.7	0.34	0.35
Roads End Picnic Site and Whitewater Put-in	0	17	0.5	1.1	0.53	0.55
Calkins Flat Dispersed Camping	0	61	3.1	4.6	3.03	3.11
Ant Canyon Dispersed Camping	0	54	1.7	3.1	1.67	1.73
Corral Creek Picnic Site and Whitewater Take-out	0	15	0.8	1.7	0.83	0.86
Thunderbird Whitewater Put-in/Take-out	0	17	0.6	1.0	0.56	0.58

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camp 3 Whitewater Put-in/Take-out	0	12	0.6	1.1	0.60	0.62
Riverkern Beach Picnic Site	0	53	1.4	2.2	1.34	1.38
All River Access Sites	0	61	1.1	2.5	1.13	1.14

CI = confidence interval; SD = standard deviation

Table 23. Vehicle Occupancy Pattern – Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	1	8	1.37	0.8	1.35	1.38
Roads End Picnic Site and Whitewater Put-in	1	17	1.70	1.4	1.67	1.72
Calkins Flat Dispersed Camping	1	61	4.49	5.0	4.44	4.54
Ant Canyon Dispersed Camping	1	54	3.05	3.6	3.01	3.10
Corral Creek Picnic Site and Whitewater Take-out	1	15	2.53	2.2	2.50	2.56
Thunderbird Whitewater Put-in/Take-out	1	17	1.63	1.2	1.61	1.64
Camp 3 Whitewater Put-in/Take-out	1	12	1.62	1.1	1.60	1.63
Riverkern Beach Picnic Site	1	53	2.39	2.5	2.36	2.42
All River Access Sites	1	61	2.63	3.2	2.62	2.65

CI = confidence interval; SD = standard deviation

Table 24 and Table 25 provide a summary of the total vehicle counts (all values including zeros) and the occupancy pattern (only when vehicle values are equal to or greater than one) at the river access sites along the Fairview Dam Bypass Reach by season (peak whitewater boating season and rest of the year), respectively. Table 26 and Table 27 provide a similar summary but for weekdays and weekend days at the river access sites along the Fairview Dam Bypass Reach.

Table 24. Seasonal Summary of Vehicles in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	0	8	0.57	0.88	0.55	0.58	0	6	0.23	0.56	0.22	0.24
Roads End Picnic Site and Whitewater Put-in	0	11	0.67	1.26	0.65	0.69	0	17	0.47	1.04	0.46	0.48
Calkins Flat Dispersed Camping	0	33	3.91	3.41	3.86	3.96	0	61	2.65	5.08	2.60	2.71
Ant Canyon Dispersed Camping	0	15	2.04	2.02	2.01	2.07	0	54	1.52	3.52	1.49	1.56
Corral Creek Picnic Site and Whitewater Take-out	0	15	1.52	2.24	1.49	1.56	0	15	0.50	1.27	0.48	0.51
Thunderbird Whitewater Put-in/Take-out	0	17	1.00	1.23	0.98	1.02	0	13	0.36	0.84	0.35	0.36
Camp 3 Whitewater Put-in/Take-out	0	12	0.69	1.09	0.68	0.71	0	11	0.57	1.03	0.56	0.58
Riverkern Beach Picnic Site	0	28	2.13	2.22	2.10	2.17	0	53	0.94	2.13	0.92	0.97
All River Access Sites	0	33	1.57	2.23	1.56	1.58	0	61	0.91	2.57	0.90	0.92

CI = confidence interval; SD = standard deviation

Table 25. Seasonal Occupancy Pattern (Vehicles) in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	1	8	1.44	0.86	1.42	1.46	1	6	1.28	0.63	1.27	1.30
Roads End Picnic Site and Whitewater Put-in	1	11	1.85	1.49	1.81	1.88	1	17	1.60	1.35	1.57	1.63
Calkins Flat Dispersed Camping	1	33	4.32	3.32	4.27	4.37	1	61	4.63	5.99	4.54	4.71
Ant Canyon Dispersed Camping	1	15	2.75	1.89	2.71	2.78	1	54	3.31	4.59	3.23	3.38
Corral Creek Picnic Site and Whitewater Take-out	1	15	2.82	2.38	2.77	2.87	1	15	2.17	1.86	2.13	2.21
Thunderbird Whitewater Put-in/Take-out	1	17	1.76	1.15	1.74	1.78	1	13	1.47	1.13	1.44	1.49
Camp 3 Whitewater Put-in/Take-out	1	12	1.66	1.12	1.63	1.69	1	11	1.59	1.15	1.57	1.61
Riverkern Beach Picnic Site	1	28	2.75	2.16	2.72	2.79	1	53	2.06	2.76	2.02	2.11
All River Access Sites	1	33	2.67	2.35	2.65	2.68	1	61	2.60	3.80	2.58	2.63

CI = confidence interval; SD = standard deviation

Table 26. Type of Day Summary of Vehicles in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	0	8	0.19	0.46	0.19	0.20	0	8	0.54	0.89	0.53	0.55
Roads End Picnic Site and Whitewater Put-in	0	9	0.36	0.76	0.35	0.37	0	17	0.77	1.43	0.75	0.79
Calkins Flat Dispersed Camping	0	34	1.72	2.60	1.69	1.75	0	61	4.83	5.92	4.76	4.91
Ant Canyon Dispersed Camping	0	21	0.85	1.35	0.84	0.87	0	54	2.80	4.22	2.75	2.86
Corral Creek Picnic Site and Whitewater Take-out	0	12	0.57	1.25	0.56	0.58	0	15	1.21	2.17	1.18	1.23
Thunderbird Whitewater Put-in/Take-out	0	15	0.39	0.73	0.38	0.40	0	17	0.81	1.29	0.79	0.83
Camp 3 Whitewater Put-in/Take-out	0	8	0.43	0.77	0.42	0.44	0	12	0.84	1.30	0.83	0.86
Riverkern Beach Picnic Site	0	36	0.98	1.49	0.96	0.99	0	53	1.86	2.87	1.83	1.90
All River Access Sites	0	36	0.69	1.41	0.68	0.69	0	61	1.72	3.31	1.70	1.73

CI = confidence interval; SD = standard deviation

Table 27. Type of Day Occupancy Pattern (Vehicles) in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	1	8	1.15	0.44	1.14	1.16	1	8	1.49	0.88	1.48	1.51
Roads End Picnic Site and Whitewater Put-in	1	9	1.42	0.88	1.40	1.44	1	17	1.92	1.69	1.89	1.96
Calkins Flat Dispersed Camping	1	34	2.83	2.82	2.79	2.87	1	61	6.17	6.04	6.08	6.26
Ant Canyon Dispersed Camping	1	21	1.87	1.45	1.84	1.89	1	54	4.09	4.55	4.02	4.16
Corral Creek Picnic Site and Whitewater Take-out	1	12	2.05	1.60	2.01	2.08	1	15	2.96	2.52	2.90	3.01
Thunderbird Whitewater Put-in/Take-out	1	15	1.36	0.73	1.34	1.37	1	17	1.86	1.38	1.83	1.88
Camp 3 Whitewater Put-in/Take-out	1	8	1.37	0.76	1.36	1.39	1	12	1.84	1.36	1.82	1.87
Riverkern Beach Picnic Site	1	36	1.87	1.60	1.85	1.90	1	53	2.96	3.13	2.91	3.01
All River Access Sites	1	36	1.90	1.79	1.89	1.92	1	61	3.30	3.98	3.27	3.32

CI = confidence interval; SD = standard deviation

4.1. NFKR ABOVE FAIRVIEW DAM

Table 28 lists the relative percentage of vehicle types at each of the river access sites.

Table 28. Relative Percentage of Vehicle Types at River Access Sites above Fairview Dam

Site	Sedans	SUVs	Trucks	Vans	Buses	Other ^a
Johnsondale Bridge River Access	24.4%	42.9%	19.2%	8.3%	0.2%	5.0%
Brush Creek Dispersed Camping	19.8%	12.5%	21.7%	3.9%	0.0%	42.2%
Willow Point Whitewater Take-out	18.8%	32.6%	39.0%	8.9%	0.6%	0.0%
All River Access Sites	21.7%	27.8%	22.4%	6.3%	0.2%	21.7%

SUV = sport utility vehicle

Notes:

^a Based on a review of select photographs, trailers were most commonly categorized by the AI tool as other vehicles. At the Brush Creek Dispersed Camping river access site, the AI tool routinely recorded the restroom buildings, a dumpster, and recreational vehicles as other vehicles.

Table 29 provides the range of values (minimum and maximum) and the average, SD, and 95 percent CI for vehicles recorded at each river access above Fairview Dam. Table 30 provides the same information but limited to those times when vehicles were recorded as being on site.

Table 29. Vehicles above Fairview Dam – Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	0	35	1.99	2.59	1.97	2.01
Brush Creek Dispersed Camping	0	75	2.13	2.85	2.10	2.15
Willow Point Whitewater Take-out	0	20	0.46	0.89	0.46	0.47
All River Access Sites	0	75	1.53	2.40	1.52	1.54

CI = confidence interval; SD = standard deviation

Table 30. Vehicle Occupancy Pattern above Fairview Dam – Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	1	35	2.96	2.66	2.93	2.98
Brush Creek Dispersed Camping	1	75	3.11	2.98	3.08	3.14
Willow Point Whitewater Take-out	1	20	1.54	0.99	1.53	1.56
All River Access Sites	1	75	2.76	2.65	2.75	2.78

CI = confidence interval; SD = standard deviation

Table 31 and Table 32 provide a summary of the total vehicle counts (all values including zeros) and the occupancy pattern (only when vehicle values are equal to or greater than one) at the river access sites above Fairview Dam, respectively. Table 33 and Table 34 provide a similar summary but for weekdays and weekend days at the river access sites along the Fairview Dam Bypass Reach.

Table 31. Seasonal Summary of Vehicles above Fairview Dam – Descriptive Statistics

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	0	15	2.01	2.23	1.97	2.04	0	35	1.98	2.75	1.95	2.01
Brush Creek Dispersed Camping	0	21	2.62	2.73	2.58	2.67	0	75	1.88	2.88	1.84	1.91
Willow Point Whitewater Take-out	0	20	0.71	1.04	0.70	0.73	0	14	0.34	0.78	0.33	0.34
All River Access Sites	0	21	1.78	2.27	1.76	1.80	0	75	1.40	2.46	1.38	1.41

CI = confidence interval; SD = standard deviation

Table 32. Seasonal Occupancy Pattern (Vehicles) above Fairview Dam – Descriptive Statistics

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	1	15	2.87	2.16	2.83	2.91	1	35	3.00	2.89	2.96	3.04
Brush Creek Dispersed Camping	1	21	3.21	2.69	3.16	3.25	1	75	3.04	3.15	3.00	3.09
Willow Point Whitewater Take-out	1	20	1.63	0.98	1.61	1.65	1	14	1.46	0.99	1.44	1.48
All River Access Sites	1	21	2.73	2.30	2.71	2.76	1	75	2.78	2.86	2.76	2.81

CI = confidence interval; SD = standard deviation

Table 33. Type of Day Summary of Vehicles above Fairview Dam – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	0	31	1.52	1.80	1.50	1.54	0	35	2.61	3.25	2.57	2.65
Brush Creek Dispersed Camping	0	19	1.46	1.86	1.44	1.48	0	75	3.00	3.60	2.95	3.04
Willow Point Whitewater Take-out	0	9	0.31	0.67	0.31	0.32	0	20	0.66	1.09	0.64	0.67
All River Access Sites	0	31	1.10	1.64	1.09	1.11	0	75	2.09	3.04	2.07	2.11

CI = confidence interval; SD = standard deviation

Table 34. Type of Day Occupancy Pattern (Vehicles) above Fairview Dam – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	1	31	2.31	1.76	2.28	2.33	1	35	3.76	3.30	3.71	3.81
Brush Creek Dispersed Camping	1	19	2.42	1.84	2.39	2.44	1	75	3.81	3.65	3.75	3.86
Willow Point Whitewater Take-out	1	9	1.34	0.74	1.33	1.36	1	20	1.70	1.13	1.67	1.72
All River Access Sites	1	31	2.20	1.72	2.19	2.22	1	75	3.35	3.26	3.32	3.38

CI = confidence interval; SD = standard deviation

4.2. NFKR BELOW THE KR3 POWERHOUSE

Table 35 lists the relative percentage of vehicle types at the KR3 Powerhouse Whitewater Put-in/Take-out (upstream and downstream cameras).

Table 35. Relative Percentage of Vehicle Types below the KR3 Powerhouse

Camera/Site	Sedans	SUVs	Trucks	Vans	Buses	Other ^a
Camera 15/17 (North-upstream view)	30.6%	33.3%	27.5%	5.1%	0.2%	3.2%
Camera 16/18 (South-downstream view)	22.4%	28.3%	32.0%	7.7%	3.1%	6.6%
Combined KR3 Powerhouse Whitewater Put-in/Take-out	27.8%	31.6%	29.0%	6.0%	1.2%	4.4%

KR3 = Kern River No. 3; SUV = sport utility vehicle

Notes:

^a Based on a review of select photographs, trailers were most commonly categorized by the AI tool as other vehicles.

Table 36 provides the range of values (minimum and maximum) and the average, SD, and 95 percent CI for vehicles recorded at the river access site below the KR3 Powerhouse and Table 37 provides the same information but limited to those times when vehicles were recorded as being on site.

Table 36. Vehicles below KR3 Powerhouse – Descriptive Statistics

Camera/Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	0	16	1.19	1.38	1.17	1.20
Camera 16/18 (South-downstream view)	0	14	0.64	1.10	0.63	0.65
Combined KR3 Powerhouse Whitewater Put-in/Take-out	0	16	0.92	1.28	0.91	0.93

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 37. Vehicle Occupancy Pattern below KR3 Powerhouse – Descriptive Statistics

Camera/Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	1	16	1.97	1.28	1.95	1.98
Camera 16/18 (South-downstream view)	1	14	1.73	1.18	1.71	1.74
Combined KR3 Powerhouse Whitewater Put-in/Take-out	1	16	1.88	1.25	1.87	1.89

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 38 and Table 39 provide a summary of the total vehicle counts (all values including zeros) and the occupancy pattern (only when vehicle values are equal to or greater than one) at the river access site below the KR3 Powerhouse, respectively. Table 40 (all values) and Table 41 (values equal to and greater than one) provide a similar summary but for weekdays and weekend days at this river access site.

Table 38. Seasonal Summary of Vehicles below KR3 Powerhouse – Descriptive Statistics

Camera/Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	0	16	1.79	1.50	1.76	1.81	0	13	0.88	1.21	0.87	0.89
Camera 16/18 (South-downstream view)	0	11	1.02	1.25	1.00	1.04	0	14	0.44	0.95	0.43	0.45
Combined KR3 Powerhouse Whitewater Put-in/Take-out	0	16	1.40	1.43	1.39	1.42	0	14	0.67	1.38	0.66	0.68

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 39. Seasonal Occupancy Pattern (Vehicles) below KR3 Powerhouse – Descriptive Statistics

Camera/Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	1	16	2.22	1.36	2.20	2.24	1	13	1.76	1.17	1.74	1.78
Camera 16/18 (South-downstream view)	1	11	1.85	1.13	1.83	1.88	1	14	1.59	1.22	1.56	1.61
Combined KR3 Powerhouse Whitewater Put-in/Take-out	1	16	2.07	1.28	2.05	2.09	1	14	1.70	1.19	1.69	1.72

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 40. Type of Day Summary of Vehicles below KR3 Powerhouse – Descriptive Statistics

Camera/Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	0	10	0.88	1.05	0.87	0.89	0	16	1.58	1.64	1.56	1.60
Camera 16/18 (South-downstream view)	0	11	0.46	0.84	0.45	0.47	0	14	0.89	1.33	0.87	0.91
Combined KR3 Powerhouse Whitewater Put-in/Take-out	0	11	0.67	0.98	0.67	0.68	0	16	1.25	1.54	1.23	1.26

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 41. Type of Day Occupancy Pattern (Vehicles) below KR3 Powerhouse – Descriptive Statistics

Camera/Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	1	10	1.63	0.90	1.61	1.64	1	16	2.32	1.50	2.30	2.34
Camera 16/18 (South-downstream view)	1	11	1.48	0.88	1.46	1.50	1	14	1.95	1.36	1.92	1.98
Combined KR3 Powerhouse Whitewater Put-in/Take-out	1	11	1.57	0.90	1.56	1.59	1	16	2.18	1.46	2.16	2.19

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

5.0 WATERCRAFT COUNTS

Table 42 lists the percentage of photographs from the year-long study that included at least one watercraft. The AI tool detected and categorized watercraft into five general categories: small kayaks (hard shell kayaks), large kayaks (primarily inflatable kayaks), small rafts (e.g., pack rafts, catarafts, shredders), large rafts, and other watercraft. Table 42 includes all types of watercraft.

Table 42. Percent of Photographs at each River Access Site with Watercraft

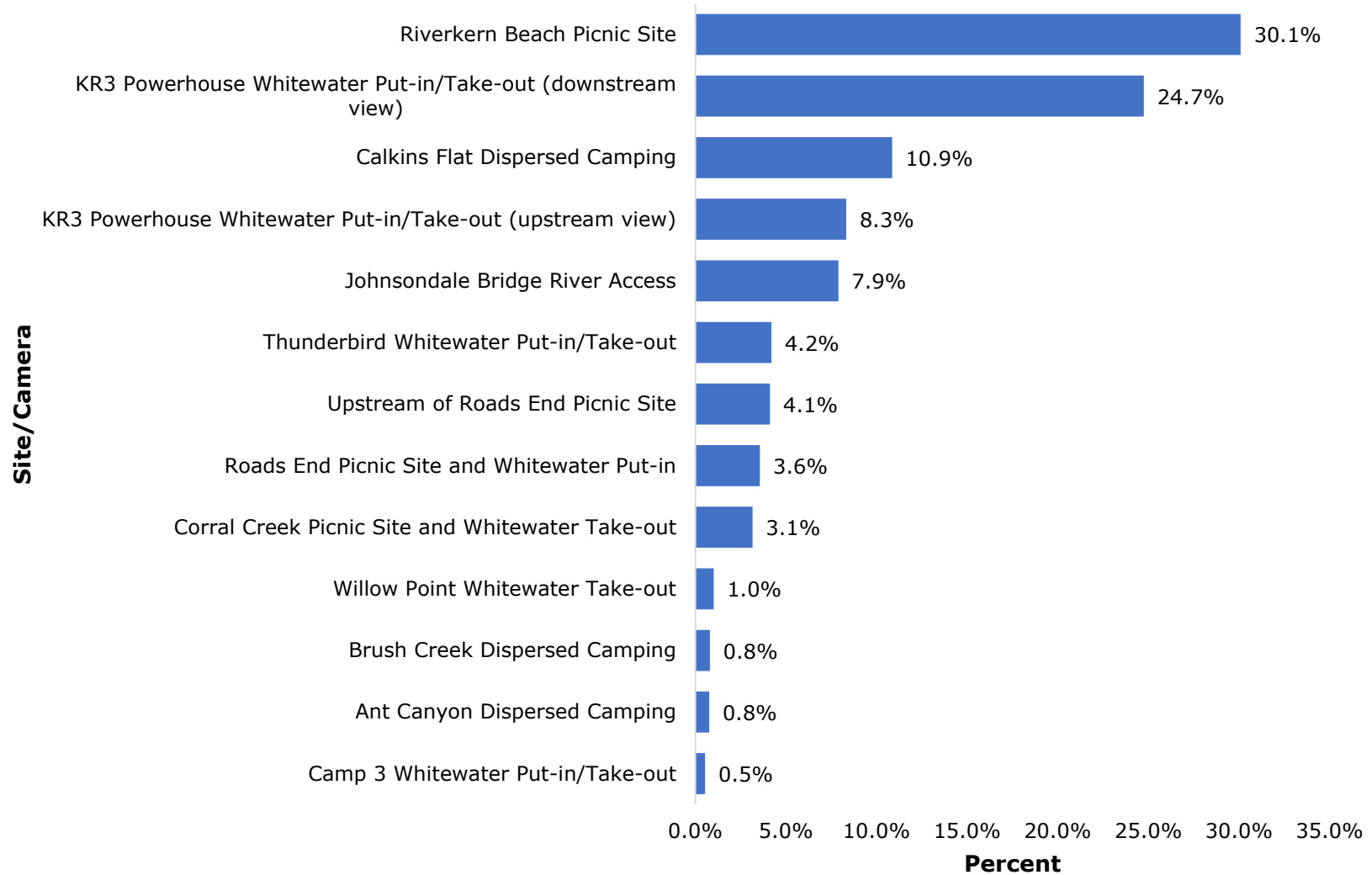
River Access Site	Watercraft ^a
Fairview Dam Bypass Reach	
Upstream of Roads End Picnic Site	1.0%
Roads End Picnic Site and Whitewater Put-in	0.8%
Calkins Flat Dispersed Camping	2.8%
Ant Canyon Dispersed Camping	0.2%
Corral Creek Picnic Site and Whitewater Take-out	0.7%
Thunderbird Whitewater Put-in/Take-out	1.0%
Camp 3 Whitewater Put-in/Take-out	0.2%
Riverkern Beach Picnic Site	5.9%
Above Fairview Dam	
Johnsondale Bridge River Access	1.5%
Brush Creek Dispersed Camping	0.1%
Willow Point Whitewater Take-out	0.2%
Below KR3 Powerhouse	
KR3 Powerhouse Whitewater Put-in/Take-out (North-upstream view)	1.8%
KR3 Powerhouse Whitewater Put-in/Take-out (South-downstream view)	5.0%

KR3 = Kern River No. 3

Notes:

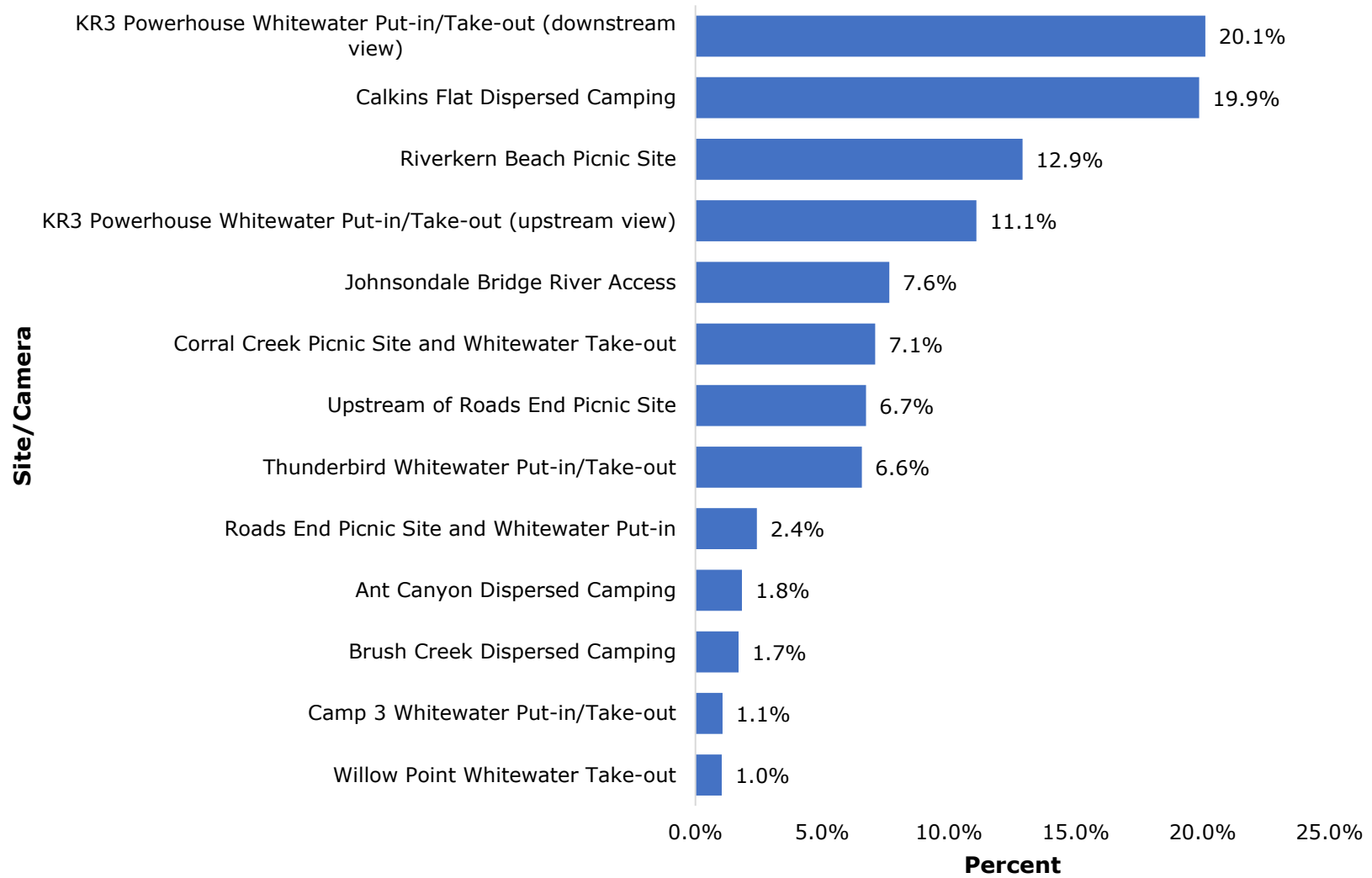
^a Indicates the percentage of photographs with at least one observed watercraft (any type).

Figure 6 ranks the river access sites (camera locations) by the relative percentage of watercraft (all types) recorded during the year-long camera study. Figures 7, 8, and 9 provide a similar ranking but for kayaks, rafts, and other watercraft, respectively.



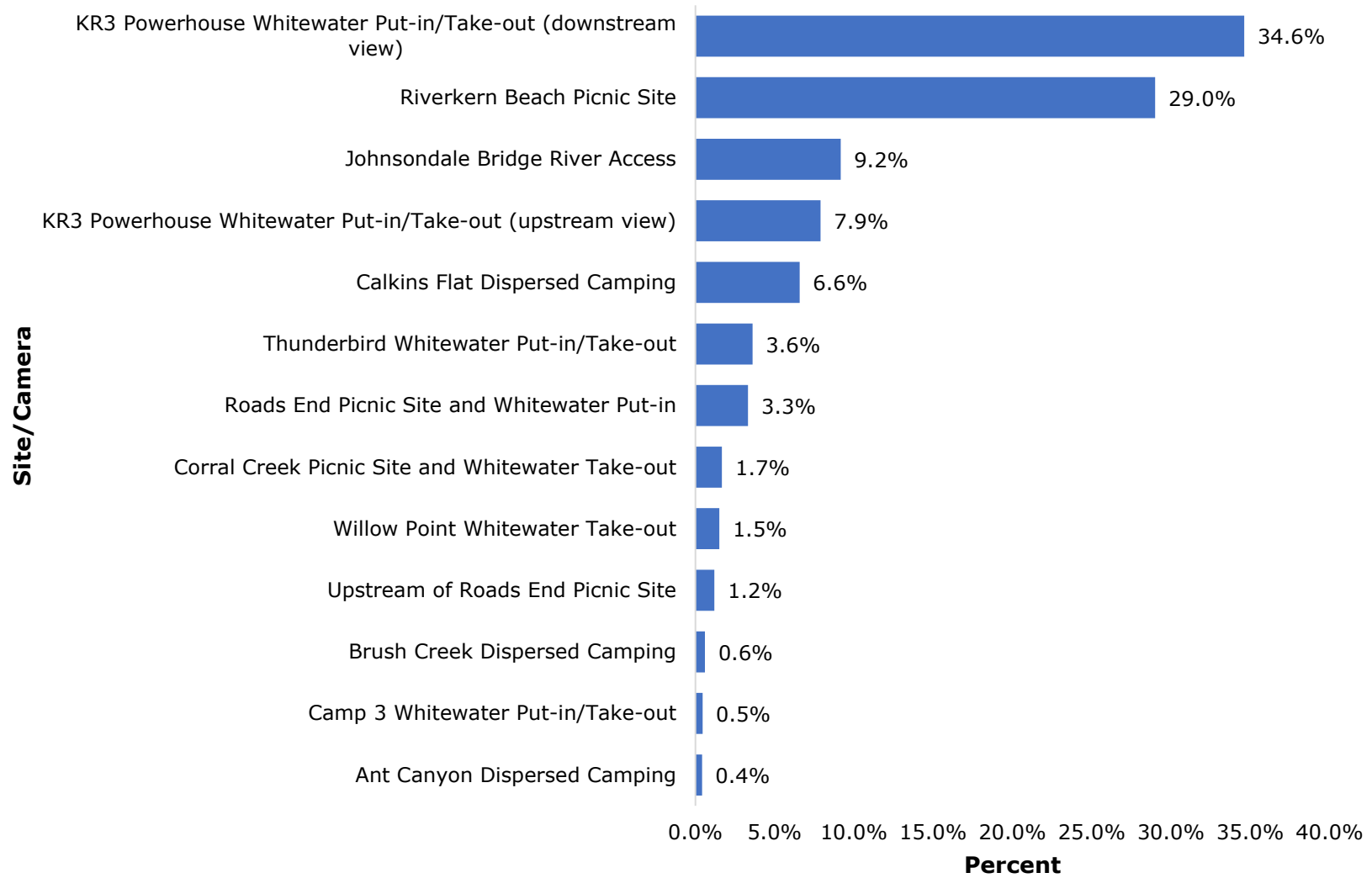
KR3 = Kern River No. 3

Figure 6. Site Rankings by Relative Percent of Annual Watercraft (all types) Counts.



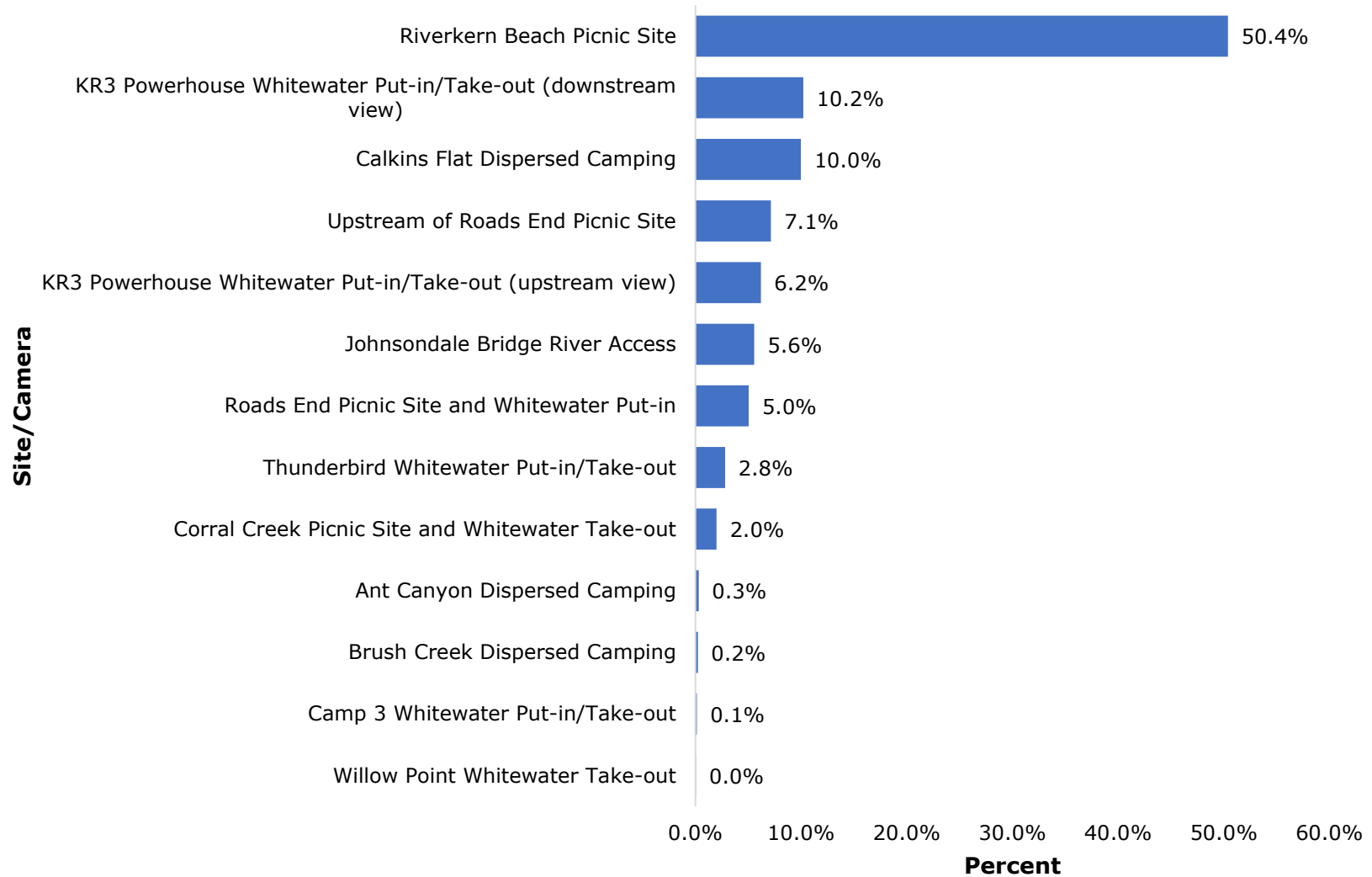
KR3 = Kern River No. 3

Figure 7. Site Rankings by Relative Percent of Annual Kayak Counts.



KR3 = Kern River No. 3

Figure 8. Site Rankings by Relative Percent of Annual Raft Counts.



KR3 = Kern River No. 3

Figure 9. Site Rankings by Relative Percent of Annual Other Watercraft Counts.

5.1. FAIRVIEW DAM BYPASS REACH

Table 43 lists the relative percentage for each type of watercraft at each river access site in the Fairview Dam Bypass Reach. Common types of other watercraft that were recorded in the bypass reach include stand up paddle boards, inner tubes, and other small (non-whitewater boating) inflatables.

Table 43. Relative Percentage of Watercraft Types in the Fairview Dam Bypass Reach

Site	Small Kayaks	Large Kayaks	Small Rafts	Large Rafts	Other
Upstream of Roads End Picnic Site	41.9%	0.3%	13.3%	0.9%	43.6%
Roads End Picnic Site and Whitewater Put-in	18.1%	0.0%	18.3%	26.9%	36.7%
Calkins Flat Dispersed Camping	47.8%	0.4%	27.1%	1.1%	23.6%
Ant Canyon Dispersed Camping	62.6%	0.0%	23.1%	4.1%	10.3%
Corral Creek Picnic Site and Whitewater Take-out	56.7%	1.4%	21.8%	4.2%	15.9%
Thunderbird Whitewater Put-in/Take-out	40.6%	0.0%	37.7%	4.7%	17.0%
Camp 3 Whitewater Put-in/Take-out	51.1%	0.7%	30.7%	10.9%	6.6%
All River Access Sites	26.3%	0.2%	27.9%	11.4%	34.3%

While the AI tool was accurate in identifying different types of watercraft, it did not consistently categorize them by size (small or large). As such and to facilitate the statistical summaries, the small and large categories for both kayaks and rafts were combined into one category each (all kayaks and all rafts), except where noted otherwise.

Table 44, Table 45, Table 46, and Table 47 provide the range of values (minimum and maximum), as well as the average, SD, and 95 percent CI for each type of watercraft (all kayaks, all rafts, other watercraft), as well as for all types of watercraft (combination of all types), recorded at each river access sites. Table 48, Table 49, Table 50, and Table 51 provide the same information but limited to those times when watercraft were recorded as being on site.

Table 44. Kayaks in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	0	15	0.01	0.20	0.01	0.01
Roads End Picnic Site and Whitewater Put-in	0	5	0.00	0.08	0.00	0.00

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Calkins Flat Dispersed Camping	0	8	0.03	0.27	0.02	0.03
Ant Canyon Dispersed Camping	0	6	0.00	0.08	0.00	0.00
Corral Creek Picnic Site and Whitewater Take-out	0	5	0.01	0.15	0.01	0.01
Thunderbird Whitewater Put-in/Take-out	0	6	0.01	0.14	0.01	0.01
Camp 3 Whitewater Put-in/Take-out	0	3	0.00	0.05	0.00	0.00
Riverkern Beach Picnic Site	0	8	0.02	0.19	0.02	0.02
All River Access Sites	0	15	0.01	0.16	0.01	0.01

CI = confidence interval; SD = standard deviation

Table 45. Rafts in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	0	4	0.00	0.06	0.00	0.00
Roads End Picnic Site and Whitewater Put-in	0	5	0.01	0.16	0.01	0.01
Calkins Flat Dispersed Camping	0	6	0.01	0.17	0.01	0.02
Ant Canyon Dispersed Camping	0	5	0.00	0.05	0.00	0.00
Corral Creek Picnic Site and Whitewater Take-out	0	7	0.00	0.10	0.00	0.00
Thunderbird Whitewater Put-in/Take-out	0	6	0.01	0.14	0.01	0.01
Camp 3 Whitewater Put-in/Take-out	0	5	0.00	0.05	0.00	0.00
Riverkern Beach Picnic Site	0	14	0.07	0.49	0.07	0.08
All River Access Sites	0	14	0.01	0.20	0.01	0.01

CI = confidence interval; SD = standard deviation

Table 46. Other Watercraft in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	0	8	0.01	0.16	0.01	0.01

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Roads End Picnic Site and Whitewater Put-in	0	9	0.01	0.15	0.01	0.01
Calkins Flat Dispersed Camping	0	9	0.01	0.16	0.01	0.01
Ant Canyon Dispersed Camping	0	4	0.00	0.03	0.00	0.00
Corral Creek Picnic Site and Whitewater Take-out	0	6	0.00	0.07	0.00	0.00
Thunderbird Whitewater Put-in/Take-out	0	8	0.00	0.08	0.00	0.00
Camp 3 Whitewater Put-in/Take-out	0	1	0.00	0.01	0.00	0.00
Riverkern Beach Picnic Site	0	14	0.06	0.49	0.06	0.07
All River Access Sites	0	14	0.01	0.20	0.01	0.01

CI = confidence interval; SD = standard deviation

Table 47. Watercraft (all types) in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	0	15	0.02	0.27	0.02	0.02
Roads End Picnic Site and Whitewater Put-in	0	9	0.02	0.24	0.02	0.02
Calkins Flat Dispersed Camping	0	9	0.05	0.38	0.05	0.06
Ant Canyon Dispersed Camping	0	6	0.00	0.10	0.00	0.00
Corral Creek Picnic Site and Whitewater Take-out	0	9	0.02	0.22	0.01	0.02
Thunderbird Whitewater Put-in/Take-out	0	8	0.02	0.24	0.02	0.02
Camp 3 Whitewater Put-in/Take-out	0	5	0.00	0.07	0.00	0.00
Riverkern Beach Picnic Site	0	15	0.15	0.75	0.15	0.16
All River Access Sites	0	15	0.04	0.35	0.03	0.04

CI = confidence interval; SD = standard deviation

Table 48. Occupancy Pattern (Kayaks) Along the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	1	15	2.54	2.34	2.19	2.89
Roads End Picnic Site and Whitewater Put-in	1	5	1.44	0.79	1.29	1.58
Calkins Flat Dispersed Camping	1	8	2.19	1.24	2.09	2.28
Ant Canyon Dispersed Camping	1	6	1.88	1.17	1.59	2.16
Corral Creek Picnic Site and Whitewater Take-out	1	5	1.95	0.96	1.83	2.07
Thunderbird Whitewater Put-in/Take-out	1	6	1.81	1.00	1.68	1.94
Camp 3 Whitewater Put-in/Take-out	1	3	1.61	0.65	1.42	1.81
Riverkern Beach Picnic Site	1	8	1.65	0.93	1.57	1.73
All River Access Sites	1	15	1.94	1.26	1.88	1.99

CI = confidence interval; SD = standard deviation

Table 49. Occupancy Pattern (Rafts) Along the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	1	4	1.18	0.52	1.09	1.27
Roads End Picnic Site and Whitewater Put-in	1	5	2.58	1.25	2.39	2.78
Calkins Flat Dispersed Camping	1	6	1.42	0.81	1.35	1.49
Ant Canyon Dispersed Camping	1	5	1.83	1.28	1.36	2.29
Corral Creek Picnic Site and Whitewater Take-out	1	7	1.50	1.03	1.33	1.67
Thunderbird Whitewater Put-in/Take-out	1	6	1.57	0.94	1.46	1.68
Camp 3 Whitewater Put-in/Take-out	1	5	1.68	1.12	1.30	2.05
Riverkern Beach Picnic Site	1	14	2.25	1.62	2.17	2.33
All River Access Sites	1	14	1.96	1.41	1.90	2.01

CI = confidence interval; SD = standard deviation

Table 50. Occupancy Pattern (Other Watercraft) Along the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	1	8	1.83	1.30	1.67	1.99
Roads End Picnic Site and Whitewater Put-in	1	9	2.11	1.60	1.86	2.36
Calkins Flat Dispersed Camping	1	9	1.51	0.99	1.41	1.60
Ant Canyon Dispersed Camping	1	4	1.43	0.85	0.98	1.87
Corral Creek Picnic Site and Whitewater Take-out	1	6	1.39	0.93	1.20	1.58
Thunderbird Whitewater Put-in/Take-out	1	8	1.34	0.93	1.18	1.49
Camp 3 Whitewater Put-in/Take-out	1	1	1.00	0.00	1.00	1.00
Riverkern Beach Picnic Site	1	14	2.48	1.83	2.38	2.58
All River Access Sites	1	14	2.10	1.63	2.03	2.16

CI = confidence interval; SD = standard deviation

Table 51. Occupancy Pattern (All types of Watercraft) Along the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	1	15	2.03	1.77	1.87	2.18
Roads End Picnic Site and Whitewater Put-in	1	9	2.34	1.47	2.19	2.49
Calkins Flat Dispersed Camping	1	9	1.99	1.25	1.92	2.06
Ant Canyon Dispersed Camping	1	6	2.17	1.26	1.91	2.43
Corral Creek Picnic Site and Whitewater Take-out	1	9	2.20	1.37	2.06	2.34
Thunderbird Whitewater Put-in/Take-out	1	8	2.06	1.29	1.95	2.17
Camp 3 Whitewater Put-in/Take-out	1	5	1.65	0.86	1.47	1.84
Riverkern Beach Picnic Site	1	15	2.59	1.81	2.52	2.65
All River Access Sites	1	15	2.31	1.62	2.27	2.35

CI = confidence interval; SD = standard deviation

The following tables provide a summary of watercraft counts (all values including zeros) at the river access sites along the Fairview Dam Bypass Reach by season (peak whitewater boating season and rest of the year):

- Table 52 – kayaks
- Table 53 – rafts
- Table 54 – other types of watercraft
- Table 55 – all types of watercraft

Table 52. Seasonal Summary of Kayaks in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	0	15	0.02	0.34	0.02	0.03	0	3	0.00	0.05	0.00	0.00
Roads End Picnic Site and Whitewater Put-in	0	5	0.01	0.12	0.00	0.01	0	2	0.00	0.04	0.00	0.00
Calkins Flat Dispersed Camping	0	8	0.07	0.44	0.06	0.08	0	5	0.00	0.10	0.00	0.00
Ant Canyon Dispersed Camping	0	6	0.01	0.13	0.00	0.01	0	1	0.00	0.03	0.00	0.00
Corral Creek Picnic Site and Whitewater Take-out	0	5	0.03	0.25	0.02	0.03	0	4	0.00	0.03	0.00	0.00
Thunderbird Whitewater Put-in/Take-out	0	6	0.02	0.23	0.02	0.03	0	3	0.00	0.04	0.00	0.00
Camp 3 Whitewater Put-in/Take-out	0	3	0.00	0.08	0.00	0.00	0	1	0.00	0.02	0.00	0.00
Riverkern Beach Picnic Site	0	8	0.04	0.29	0.03	0.04	0	5	0.01	0.11	0.00	0.01
All River Access Sites	0	15	0.02	0.26	0.02	0.03	0	5	0.00	0.06	0.00	0.00

CI = confidence interval; SD = standard deviation

Table 53. Seasonal Summary of Rafts in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	0	4	0.01	0.10	0.01	0.01	0	3	0.00	0.03	0.00	0.00
Roads End Picnic Site and Whitewater Put-in	0	5	0.02	0.26	0.02	0.02	0	4	0.00	0.07	0.00	0.00
Calkins Flat Dispersed Camping	0	6	0.04	0.28	0.04	0.05	0	3	0.00	0.05	0.00	0.00
Ant Canyon Dispersed Camping	0	5	0.00	0.09	0.00	0.00	0	0	0.00	0.00	0.00	0.00
Corral Creek Picnic Site and Whitewater Take-out	0	7	0.01	0.16	0.01	0.01	0	0	0.00	0.00	0.00	0.00
Thunderbird Whitewater Put-in/Take-out	0	6	0.03	0.23	0.02	0.03	0	2	0.00	0.02	0.00	0.00
Camp 3 Whitewater Put-in/Take-out	0	5	0.00	0.09	0.00	0.00	0	1	0.00	0.01	0.00	0.00
Riverkern Beach Picnic Site	0	14	0.17	0.75	0.15	0.18	0	7	0.02	0.25	0.02	0.03
All River Access Sites	0	14	0.04	0.33	0.03	0.04	0	7	0.00	0.09	0.00	0.00

CI = confidence interval; SD = standard deviation

Table 54. Seasonal Summary of Other Watercraft in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	0	6	0.01	0.13	0.01	0.01	0	8	0.01	0.17	0.01	0.01
Roads End Picnic Site and Whitewater Put-in	0	4	0.00	0.09	0.00	0.00	0	9	0.01	0.17	0.01	0.01
Calkins Flat Dispersed Camping	0	4	0.03	0.20	0.02	0.03	0	9	0.01	0.14	0.00	0.01
Ant Canyon Dispersed Camping	0	4	0.00	0.03	0.00	0.00	0	2	0.00	0.02	0.00	0.00
Corral Creek Picnic Site and Whitewater Take-out	0	3	0.00	0.08	0.00	0.01	0	6	0.00	0.07	0.00	0.00
Thunderbird Whitewater Put-in/Take-out	0	4	0.01	0.12	0.01	0.01	0	8	0.00	0.06	0.00	0.00
Camp 3 Whitewater Put-in/Take-out	0	1	0.00	0.02	0.00	0.00	0	1	0.00	0.01	0.00	0.00
Riverkern Beach Picnic Site	0	14	0.15	0.74	0.14	0.17	0	9	0.02	0.27	0.01	0.02
All River Access Sites	0	14	0.03	0.29	0.02	0.03	0	9	0.01	0.14	0.00	0.01

CI = confidence interval; SD = standard deviation

Table 55. Seasonal Summary of Watercraft in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	0	15	0.04	0.40	0.03	0.04	0	8	0.01	0.18	0.01	0.01
Roads End Picnic Site and Whitewater Put-in	0	7	0.03	0.32	0.03	0.04	0	9	0.01	0.19	0.01	0.01
Calkins Flat Dispersed Camping	0	9	0.14	0.60	0.13	0.15	0	9	0.01	0.18	0.01	0.01
Ant Canyon Dispersed Camping	0	6	0.01	0.17	0.01	0.01	0	2	0.00	0.04	0.00	0.00
Corral Creek Picnic Site and Whitewater Take-out	0	9	0.04	0.36	0.04	0.05	0	6	0.00	0.07	0.00	0.00
Thunderbird Whitewater Put-in/Take-out	0	8	0.06	0.40	0.05	0.06	0	8	0.00	0.08	0.00	0.00
Camp 3 Whitewater Put-in/Take-out	0	5	0.01	0.12	0.01	0.01	0	1	0.00	0.02	0.00	0.00
Riverkern Beach Picnic Site	0	15	0.35	1.13	0.34	0.37	0	9	0.05	0.38	0.04	0.05
All River Access Sites	0	15	0.08	0.54	0.08	0.09	0	9	0.01	0.18	0.01	0.01

CI = confidence interval; SD = standard deviation

To account for when the river access sites are in use for boating purposes, the following tables provide the annual occupancy pattern (only when watercraft values are equal to or greater than one) at the river access sites:

- Table 56 – kayaks
- Table 57 – rafts
- Table 58 – other types of watercraft
- Table 59 – all types of watercraft

The following tables provide annual day type (weekday and weekend day) summaries and occupancy patterns for watercraft at the river access sites:

- Table 60 (summary) and Table 64 (occupancy pattern) – kayaks
- Table 61 (summary) and Table 65 (occupancy pattern) – rafts
- Table 62 (summary) and Table 66 (occupancy pattern) – other types of watercraft
- Table 63 (summary) and Table 67 (occupancy pattern) – all types of watercraft

Table 56. Seasonal Occupancy Pattern (Kayaks) in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	1	15	2.81	2.52	2.39	3.23	1	3	1.46	0.66	1.24	1.67
Roads End Picnic Site and Whitewater Put-in	1	5	1.65	0.94	1.43	1.88	1	2	1.13	0.34	1.03	1.23
Calkins Flat Dispersed Camping	1	8	2.19	1.26	2.08	2.29	1	5	2.19	1.07	1.91	2.46
Ant Canyon Dispersed Camping	1	6	2.39	1.20	2.02	2.76	1	1	1.00	0.00	1.00	1.00
Corral Creek Picnic Site and Whitewater Take-out	1	5	1.98	0.95	1.86	2.10	1	4	1.33	0.89	0.83	1.84
Thunderbird Whitewater Put-in/Take-out	1	6	1.80	1.02	1.66	1.93	1	3	2.00	0.68	1.64	2.36
Camp 3 Whitewater Put-in/Take-out	1	3	1.79	0.64	1.58	2.01	1	1	1.00	0.00	1.00	1.00
Riverkern Beach Picnic Site	1	8	1.61	0.98	1.52	1.71	1	5	1.79	0.73	1.65	1.93
All River Access Sites	1	15	2.00	1.31	1.93	2.06	1	5	1.63	0.83	1.54	1.73

CI = confidence interval; SD = standard deviation

Table 57. Seasonal Occupancy Pattern (Rafts) in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	1	4	1.18	0.54	1.08	1.29	1	3	1.16	0.47	0.97	1.35
Roads End Picnic Site and Whitewater Put-in	1	5	2.59	1.30	2.37	2.81	1	4	2.52	0.87	2.15	2.90
Calkins Flat Dispersed Camping	1	6	1.42	0.81	1.35	1.49	1	3	1.43	0.74	1.15	1.70
Ant Canyon Dispersed Camping	1	5	1.83	1.28	1.36	2.29	0	0	0.00	0.00	0.00	0.00
Corral Creek Picnic Site and Whitewater Take-out	1	7	1.50	1.03	1.33	1.67	0	0	0.00	0.00	0.00	0.00
Thunderbird Whitewater Put-in/Take-out	1	6	1.59	0.95	1.48	1.70	1	2	1.14	0.36	0.95	1.33
Camp 3 Whitewater Put-in/Take-out	1	5	1.70	1.13	1.31	2.08	1	1	1.00	0.00	1.00	1.00
Riverkern Beach Picnic Site	1	14	2.34	1.72	2.24	2.44	1	7	1.97	1.18	1.85	2.09
All River Access Sites	1	14	1.97	1.46	1.91	2.02	1	7	1.89	1.14	1.79	1.99

CI = confidence interval; SD = standard deviation

Table 58. Seasonal Occupancy Pattern (Other Watercraft) in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	1	6	1.55	1.21	1.28	1.82	1	8	1.95	1.32	1.75	2.14
Roads End Picnic Site and Whitewater Put-in	1	4	1.84	1.17	1.44	2.25	1	9	2.18	1.69	1.88	2.48
Calkins Flat Dispersed Camping	1	4	1.31	0.61	1.25	1.38	1	9	2.26	1.62	1.92	2.60
Ant Canyon Dispersed Camping	1	4	2.50	2.12	-0.44	5.44	1	2	1.25	0.45	0.99	1.51
Corral Creek Picnic Site and Whitewater Take-out	1	3	1.27	0.55	1.13	1.41	1	6	1.59	1.35	1.13	2.04
Thunderbird Whitewater Put-in/Take-out	1	4	1.24	0.60	1.14	1.34	1	8	3.14	2.79	1.07	5.21
Camp 3 Whitewater Put-in/Take-out	1	1	1.00	0.00	1.00	1.00	1	1	1.00	0.00	1.00	1.00
Riverkern Beach Picnic Site	1	14	2.35	1.80	2.25	2.45	1	9	3.40	1.82	3.12	3.68
All River Access Sites	1	14	1.99	1.58	1.92	2.06	1	9	2.41	1.72	2.27	2.55

CI = confidence interval; SD = standard deviation

Table 59. Seasonal Occupancy Pattern of Watercraft (All Types) in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	1	15	2.22	2.11	1.98	2.47	1	8	1.79	1.21	1.63	1.94
Roads End Picnic Site and Whitewater Put-in	1	7	2.68	1.36	2.49	2.87	1	9	1.98	1.49	1.77	2.20
Calkins Flat Dispersed Camping	1	9	1.96	1.24	1.89	2.03	1	9	2.20	1.37	1.99	2.40
Ant Canyon Dispersed Camping	1	6	2.52	1.34	2.18	2.85	1	2	1.39	0.50	1.21	1.58
Corral Creek Picnic Site and Whitewater Take-out	1	9	2.29	1.36	2.14	2.44	1	6	1.52	1.24	1.16	1.88
Thunderbird Whitewater Put-in/Take-out	1	8	2.07	1.27	1.95	2.18	1	8	1.94	1.58	1.41	2.47
Camp 3 Whitewater Put-in/Take-out	1	5	1.78	0.89	1.57	1.99	1	1	1.00	0.00	1.00	1.00
Riverkern Beach Picnic Site	1	15	2.67	1.88	2.59	2.74	1	9	2.31	1.46	2.20	2.43
All River Access Sites	1	15	2.37	1.67	2.33	2.42	1	9	2.09	1.41	2.02	2.17

CI = confidence interval; SD = standard deviation

Table 60. Type of Day Summary of Kayaks in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	0	15	0.00	0.15	0.00	0.01	0	13	0.02	0.26	0.01	0.02
Roads End Picnic Site and Whitewater Put-in	0	3	0.00	0.05	0.00	0.00	0	5	0.01	0.10	0.00	0.01
Calkins Flat Dispersed Camping	0	7	0.02	0.22	0.02	0.02	0	8	0.03	0.32	0.03	0.04
Ant Canyon Dispersed Camping	0	6	0.00	0.07	0.00	0.00	0	5	0.00	0.09	0.00	0.00
Corral Creek Picnic Site and Whitewater Take-out	0	4	0.01	0.13	0.01	0.01	0	5	0.01	0.17	0.01	0.01
Thunderbird Whitewater Put-in/Take-out	0	6	0.01	0.12	0.00	0.01	0	6	0.01	0.16	0.01	0.01
Camp 3 Whitewater Put-in/Take-out	0	3	0.00	0.03	0.00	0.00	0	3	0.00	0.07	0.00	0.00
Riverkern Beach Picnic Site	0	4	0.01	0.12	0.01	0.01	0	8	0.03	0.26	0.03	0.03
All River Access Sites	0	15	0.01	0.13	0.01	0.01	0	13	0.01	0.20	0.01	0.01

CI = confidence interval; SD = standard deviation

Table 61. Type of Day Summary of Rafts in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	0	2	0.00	0.04	0.00	0.00	0	4	0.01	0.09	0.00	0.01
Roads End Picnic Site and Whitewater Put-in	0	3	0.00	0.06	0.00	0.00	0	5	0.02	0.23	0.01	0.02
Calkins Flat Dispersed Camping	0	6	0.01	0.16	0.01	0.01	0	5	0.02	0.17	0.02	0.02
Ant Canyon Dispersed Camping	0	5	0.00	0.06	0.00	0.00	0	4	0.00	0.04	0.00	0.00
Corral Creek Picnic Site and Whitewater Take-out	0	7	0.00	0.11	0.00	0.01	0	4	0.00	0.08	0.00	0.01
Thunderbird Whitewater Put-in/Take-out	0	6	0.01	0.13	0.01	0.01	0	6	0.01	0.15	0.01	0.01
Camp 3 Whitewater Put-in/Take-out	0	5	0.00	0.05	0.00	0.00	0	3	0.00	0.05	0.00	0.00
Riverkern Beach Picnic Site	0	12	0.04	0.34	0.03	0.04	0	14	0.12	0.64	0.11	0.13
All River Access Sites	0	12	0.01	0.15	0.01	0.01	0	14	0.02	0.26	0.02	0.02

CI = confidence interval; SD = standard deviation

Table 62. Type of Day Summary of Other Watercraft in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	0	6	0.00	0.10	0.00	0.01	0	8	0.02	0.21	0.01	0.02
Roads End Picnic Site and Whitewater Put-in	0	6	0.00	0.12	0.00	0.00	0	9	0.01	0.18	0.01	0.01
Calkins Flat Dispersed Camping	0	6	0.01	0.15	0.01	0.01	0	9	0.02	0.18	0.01	0.02
Ant Canyon Dispersed Camping	0	4	0.00	0.03	0.00	0.00	0	1	0.00	0.02	0.00	0.00
Corral Creek Picnic Site and Whitewater Take-out	0	3	0.00	0.05	0.00	0.00	0	6	0.00	0.09	0.00	0.01
Thunderbird Whitewater Put-in/Take-out	0	8	0.00	0.07	0.00	0.00	0	6	0.01	0.10	0.00	0.01
Camp 3 Whitewater Put-in/Take-out	0	1	0.00	0.02	0.00	0.00	0	1	0.00	0.01	0.00	0.00
Riverkern Beach Picnic Site	0	10	0.03	0.30	0.02	0.03	0	14	0.11	0.67	0.10	0.12
All River Access Sites	0	10	0.01	0.13	0.01	0.01	0	14	0.02	0.27	0.02	0.02

CI = confidence interval; SD = standard deviation

Table 63. Type of Day Summary of Watercraft (All Types) in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	0	15	0.01	0.18	0.01	0.01	0	13	0.04	0.35	0.03	0.04
Roads End Picnic Site and Whitewater Put-in	0	6	0.01	0.15	0.01	0.01	0	9	0.03	0.32	0.03	0.04
Calkins Flat Dispersed Camping	0	9	0.04	0.33	0.04	0.04	0	9	0.07	0.43	0.06	0.08
Ant Canyon Dispersed Camping	0	6	0.00	0.10	0.00	0.00	0	5	0.00	0.11	0.00	0.01
Corral Creek Picnic Site and Whitewater Take-out	0	9	0.01	0.21	0.01	0.02	0	6	0.02	0.23	0.02	0.02
Thunderbird Whitewater Put-in/Take-out	0	8	0.02	0.21	0.01	0.02	0	8	0.03	0.28	0.02	0.03
Camp 3 Whitewater Put-in/Take-out	0	5	0.00	0.07	0.00	0.00	0	3	0.00	0.08	0.00	0.00
Riverkern Beach Picnic Site	0	12	0.07	0.48	0.07	0.08	0	15	0.26	0.99	0.25	0.27
All River Access Sites	0	15	0.02	0.25	0.02	0.02	0	15	0.06	0.45	0.05	0.06

CI = confidence interval; SD = standard deviation

Table 64. Type of Day Occupancy Pattern (Kayaks) in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	1	15	2.32	3.01	1.43	3.21	1	13	2.61	2.08	2.26	2.97
Roads End Picnic Site and Whitewater Put-in	1	3	1.50	0.65	1.25	1.75	1	5	1.42	0.83	1.24	1.59
Calkins Flat Dispersed Camping	1	7	2.03	1.18	1.89	2.18	1	8	2.30	1.27	2.17	2.44
Ant Canyon Dispersed Camping	1	6	2.30	1.26	1.75	2.85	1	5	1.69	1.08	1.37	2.01
Corral Creek Picnic Site and Whitewater Take-out	1	4	1.81	0.88	1.65	1.97	1	5	2.08	1.01	1.90	2.26
Thunderbird Whitewater Put-in/Take-out	1	6	1.79	0.98	1.60	1.98	1	6	1.83	1.02	1.66	2.00
Camp 3 Whitewater Put-in/Take-out	1	3	1.29	0.69	0.97	1.62	1	3	1.81	0.56	1.60	2.03
Riverkern Beach Picnic Site	1	4	1.45	0.61	1.36	1.55	1	8	1.74	1.04	1.63	1.85
All River Access Sites	1	15	1.83	1.21	1.74	1.92	1	13	2.01	1.28	1.94	2.08

CI = confidence interval; SD = standard deviation

Table 65. Type of Day Occupancy Pattern (Rafts) in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	1	2	1.06	0.25	0.98	1.15	1	4	1.22	0.58	1.10	1.34
Roads End Picnic Site and Whitewater Put-in	1	3	1.61	0.69	1.39	1.84	1	5	2.88	1.23	2.65	3.10
Calkins Flat Dispersed Camping	1	6	1.66	1.08	1.51	1.81	1	5	1.28	0.55	1.22	1.34
Ant Canyon Dispersed Camping	1	5	1.80	1.36	1.20	2.40	1	4	1.89	1.17	1.13	2.65
Corral Creek Picnic Site and Whitewater Take-out	1	7	1.96	1.37	1.60	2.32	1	4	1.19	0.55	1.07	1.30
Thunderbird Whitewater Put-in/Take-out	1	6	1.66	0.97	1.49	1.83	1	6	1.50	0.91	1.36	1.64
Camp 3 Whitewater Put-in/Take-out	1	5	1.76	1.44	1.08	2.45	1	3	1.59	0.71	1.25	1.93
Riverkern Beach Picnic Site	1	12	1.99	1.57	1.86	2.13	1	14	2.37	1.62	2.28	2.47
All River Access Sites	1	12	1.83	1.36	1.75	1.91	1	14	2.02	1.44	1.96	2.08

CI = confidence interval; SD = standard deviation

Table 66. Type of Day Occupancy Pattern (Other Watercraft) in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	1	6	1.49	1.00	1.27	1.70	1	8	1.99	1.40	1.78	2.20
Roads End Picnic Site and Whitewater Put-in	1	6	2.68	1.75	2.11	3.24	1	9	1.93	1.52	1.66	2.21
Calkins Flat Dispersed Camping	1	6	1.60	1.00	1.45	1.75	1	9	1.44	0.97	1.32	1.56
Ant Canyon Dispersed Camping	1	4	2.20	1.10	1.24	3.16	1	1	1.00	0.00	1.00	1.00
Corral Creek Picnic Site and Whitewater Take-out	1	3	1.35	0.61	1.14	1.57	1	6	1.40	1.06	1.14	1.67
Thunderbird Whitewater Put-in/Take-out	1	8	1.20	0.99	0.94	1.46	1	6	1.43	0.88	1.24	1.62
Camp 3 Whitewater Put-in/Take-out	1	1	1.00	0.00	1.00	1.00	1	1	1.00	0.00	1.00	1.00
Riverkern Beach Picnic Site	1	10	2.04	1.48	1.90	2.19	1	14	2.67	1.93	2.55	2.80
All River Access Sites	1	10	1.82	1.33	1.73	1.92	1	14	2.23	1.74	2.14	2.31

CI = confidence interval; SD = standard deviation

Table 67. Type of Day Occupancy Pattern of Watercraft (All Types) in the Fairview Dam Bypass Reach – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Upstream of Roads End Picnic Site	1	15	1.71	1.90	1.41	2.01	1	13	2.16	1.70	1.99	2.34
Roads End Picnic Site and Whitewater Put-in	1	6	2.28	1.37	2.00	2.57	1	9	2.36	1.49	2.19	2.53
Calkins Flat Dispersed Camping	1	9	2.00	1.29	1.89	2.10	1	9	1.98	1.23	1.90	2.07
Ant Canyon Dispersed Camping	1	6	2.27	1.34	1.86	2.68	1	5	2.08	1.19	1.75	2.41
Corral Creek Picnic Site and Whitewater Take-out	1	9	2.36	1.54	2.12	2.60	1	6	2.08	1.22	1.91	2.24
Thunderbird Whitewater Put-in/Take-out	1	8	2.00	1.23	1.84	2.16	1	8	2.10	1.33	1.95	2.26
Camp 3 Whitewater Put-in/Take-out	1	5	1.59	1.09	1.24	1.95	1	3	1.70	0.63	1.51	1.88
Riverkern Beach Picnic Site	1	12	2.15	1.58	2.05	2.25	1	15	2.80	1.87	2.72	2.88
All River Access Sites	1	15	2.08	1.48	2.01	2.14	1	15	2.44	1.68	2.39	2.49

CI = confidence interval; SD = standard deviation

5.2. NFKR ABOVE FAIRVIEW DAM

Table 68 lists the relative percentage for each type of watercraft at each river access site above Fairview Dam.

Table 68. Relative Percentage of Watercraft Types above Fairview Dam

Site	Small Kayaks	Large Kayaks	Small Rafts	Large Rafts	Other
Johnsondale Bridge River Access	24.0%	0.9%	35.0%	21.9%	18.1%
Brush Creek Dispersed Camping	55.4%	0.0%	31.9%	5.4%	7.4%
Willow Point Whitewater Take-out	26.3%	0.0%	37.8%	34.7%	1.1%
All River Access Sites	26.8%	0.8%	35.0%	21.9%	15.5%

The following tables provide descriptive statistics and occupancy patterns for watercraft above Fairview Dam:

- Annual descriptive statistics: Table 69, Table 70, Table 71, and Table 72
- Annual occupancy patterns: Table 73, Table 74, Table 75, and Table 76
- Seasonal descriptive statistics: Table 77, Table 78, Table 79, and Table 80
- Seasonal occupancy patterns: Table 81, Table 82, Table 83, and Table 84
- Type of day descriptive statistics: Table 85, Table 86, Table 87, and Table 88
- Type of day occupancy patterns: Table 89, Table 90, Table 91, and Table 92

Table 69. Kayaks Above Fairview Dam – Annual Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	0	8	0.01	0.16	0.01	0.01
Brush Creek Dispersed Camping	0	8	0.00	0.09	0.00	0.00
Willow Point Whitewater Take-out	0	6	0.00	0.06	0.00	0.00
All River Access Sites	0	8	0.00	0.11	0.00	0.01

CI = confidence interval; SD = standard deviation

Table 70. Rafts Above Fairview Dam – Annual Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	0	6	0.02	0.26	0.02	0.02
Brush Creek Dispersed Camping	0	14	0.00	0.09	0.00	0.00
Willow Point Whitewater Take-out	0	6	0.00	0.11	0.00	0.00
All River Access Sites	0	14	0.01	0.17	0.01	0.01

CI = confidence interval; SD = standard deviation

Table 71. Other Watercraft Above Fairview Dam – Annual Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	0	8	0.01	0.14	0.01	0.01
Brush Creek Dispersed Camping	0	3	0.00	0.02	0.00	0.00
Willow Point Whitewater Take-out	0	1	0.00	0.01	0.00	0.00
All River Access Sites	0	8	0.00	0.08	0.00	0.00

CI = confidence interval; SD = standard deviation

Table 72. Watercraft (All Types) Above Fairview Dam – Annual Descriptive Statistics

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	0	8	0.04	0.35	0.04	0.04
Brush Creek Dispersed Camping	0	14	0.00	0.13	0.00	0.01
Willow Point Whitewater Take-out	0	6	0.01	0.12	0.00	0.01
All River Access Sites	0	14	0.02	0.23	0.01	0.02

CI = confidence interval; SD = standard deviation

Table 73. Kayak Annual Occupancy Pattern Above Fairview Dam

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	1	8	1.98	1.07	1.85	2.11
Brush Creek Dispersed Camping	1	8	2.97	1.68	2.44	3.51
Willow Point Whitewater Take-out	1	6	1.77	1.04	1.44	2.09
All River Access Sites	1	8	2.07	1.19	1.94	2.19

CI = confidence interval; SD = standard deviation

Table 74. Raft Annual Occupancy Pattern Above Fairview Dam

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	1	6	2.32	1.23	2.22	2.43
Brush Creek Dispersed Camping	1	14	2.45	2.54	1.56	3.35
Willow Point Whitewater Take-out	1	6	2.07	1.40	1.78	2.35
All River Access Sites	1	14	2.29	1.35	2.19	2.40

CI = confidence interval; SD = standard deviation

Table 75. Other Watercraft Annual Occupancy Pattern Above Fairview Dam

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	1	8	2.07	1.10	1.91	2.23
Brush Creek Dispersed Camping	1	3	1.50	0.71	1.06	1.94
Willow Point Whitewater Take-out	1	1	1.00	0.00	1.00	1.00
All River Access Sites	1	8	2.03	1.09	1.87	2.18

CI = confidence interval; SD = standard deviation

Table 76. Watercraft (All Types) Annual Occupancy Pattern Above Fairview Dam

Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	1	8	2.53	1.24	2.44	2.62
Brush Creek Dispersed Camping	1	14	2.68	2.09	2.22	3.15
Willow Point Whitewater Take-out	1	6	2.05	1.33	1.82	2.28
All River Access Sites	1	14	2.48	1.34	2.40	2.56

CI = confidence interval; SD = standard deviation

Table 77. Seasonal Summary of Kayaks above Fairview Dam – Descriptive Statistics

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	0	8	0.02	0.24	0.02	0.03	0	4	0.00	0.09	0.00	0.00
Brush Creek Dispersed Camping	0	4	0.00	0.09	0.00	0.00	0	8	0.00	0.09	0.00	0.00
Willow Point Whitewater Take-out	0	6	0.00	0.08	0.00	0.00	0	3	0.00	0.04	0.00	0.00
All River Access Sites	0	8	0.01	0.15	0.01	0.01	0	8	0.00	0.08	0.00	0.00

CI = confidence interval; SD = standard deviation

Table 78. Seasonal Summary of Rafts above Fairview Dam – Descriptive Statistics

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	0	6	0.05	0.40	0.05	0.06	0	4	0.01	0.12	0.01	0.01
Brush Creek Dispersed Camping	0	2	0.00	0.03	0.00	0.00	0	14	0.00	0.10	0.00	0.00
Willow Point Whitewater Take-out	0	6	0.01	0.17	0.01	0.01	0	5	0.00	0.05	0.00	0.00
All River Access Sites	0	6	0.02	0.25	0.02	0.02	0	14	0.00	0.10	0.00	0.00

CI = confidence interval; SD = standard deviation

Table 79. Seasonal Summary of Other Watercraft above Fairview Dam – Descriptive Statistics

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	0	4	0.01	0.16	0.01	0.02	0	8	0.00	0.12	0.00	0.01
Brush Creek Dispersed Camping	0	1	0.00	0.01	0.00	0.00	0	3	0.00	0.03	0.00	0.00
Willow Point Whitewater Take-out	0	1	0.00	0.01	0.00	0.00	0	1	0.00	0.01	0.00	0.00
All River Access Sites	0	4	0.00	0.10	0.00	0.01	0	8	0.00	0.07	0.00	0.00

CI = confidence interval; SD = standard deviation

Table 80. Seasonal Summary of Watercraft (All Types) above Fairview Dam – Descriptive Statistics

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	0	8	0.09	0.52	0.08	0.09	0	8	0.01	0.21	0.01	0.02
Brush Creek Dispersed Camping	0	5	0.00	0.10	0.00	0.00	0	14	0.00	0.14	0.00	0.01
Willow Point Whitewater Take-out	0	6	0.01	0.19	0.01	0.01	0	5	0.00	0.07	0.00	0.00
All River Access Sites	0	8	0.03	0.33	0.03	0.04	0	14	0.01	0.15	0.01	0.01

CI = confidence interval; SD = standard deviation

Table 81. Seasonal Occupancy Pattern above Fairview Dam – Kayaks

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	1	8	2.03	1.13	1.87	2.19	1	4	1.83	0.88	1.62	2.04
Brush Creek Dispersed Camping	1	4	3.36	1.03	2.76	3.97	1	8	2.81	1.88	2.10	3.52
Willow Point Whitewater Take-out	1	6	2.27	1.39	1.56	2.97	1	3	1.46	0.59	1.22	1.69
All River Access Sites	1	8	2.12	1.17	1.96	2.27	1	8	1.98	1.23	1.76	2.19

CI = confidence interval; SD = standard deviation

Table 82. Seasonal Occupancy Pattern above Fairview Dam – Rafts

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	1	6	2.37	1.33	2.24	2.50	1	4	2.15	0.70	2.02	2.29
Brush Creek Dispersed Camping	1	2	1.43	0.53	1.03	1.82	1	14	2.75	2.82	1.62	3.88
Willow Point Whitewater Take-out	1	6	2.28	1.54	1.90	2.66	1	5	1.57	0.88	1.25	1.90
All River Access Sites	1	6	2.34	1.35	2.22	2.47	1	14	2.14	1.32	1.93	2.35

CI = confidence interval; SD = standard deviation

Table 83. Seasonal Occupancy Pattern above Fairview Dam – Other Watercraft

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	1	4	1.94	0.32	1.88	2.00	1	8	2.35	1.87	1.87	2.84
Brush Creek Dispersed Camping	1	1	1.00	0.00	1.00	1.00	1	3	1.56	0.73	1.08	2.03
Willow Point Whitewater Take-out	1	1	0.00	0.00	0.00	0.00	1	1	1.00	0.00	1.00	1.00
All River Access Sites	1	4	1.92	0.35	1.86	1.98	1	8	2.22	1.77	1.80	2.65

CI = confidence interval; SD = standard deviation

Table 84. Seasonal Occupancy Pattern above Fairview Dam – All Watercraft

Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	1	8	2.54	1.25	2.44	2.64	1	8	2.50	1.23	2.33	2.68
Brush Creek Dispersed Camping	1	5	2.67	1.46	1.99	3.34	1	14	2.69	2.26	2.11	3.27
Willow Point Whitewater Take-out	1	6	2.33	1.50	2.00	2.67	1	5	1.58	0.79	1.36	1.81
All River Access Sites	1	8	2.52	1.28	2.42	2.61	1	14	2.39	1.48	2.22	2.56

CI = confidence interval; SD = standard deviation

Table 85. Type of Day Summary of Kayaks above Fairview Dam – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	0	4	0.01	0.13	0.01	0.01	0	8	0.01	0.19	0.01	0.02
Brush Creek Dispersed Camping	0	4	0.00	0.07	0.00	0.00	0	8	0.00	0.11	0.00	0.00
Willow Point Whitewater Take-out	0	6	0.00	0.05	0.00	0.00	0	4	0.00	0.07	0.00	0.00
All River Access Sites	0	6	0.00	0.09	0.00	0.00	0	8	0.01	0.13	0.01	0.01

CI = confidence interval; SD = standard deviation

Table 86. Type of Day Summary of Rafts above Fairview Dam – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	0	6	0.01	0.20	0.01	0.02	0	6	0.03	0.32	0.03	0.04
Brush Creek Dispersed Camping	0	2	0.00	0.02	0.00	0.00	0	14	0.00	0.13	0.00	0.00
Willow Point Whitewater Take-out	0	6	0.00	0.09	0.00	0.00	0	6	0.01	0.13	0.00	0.01
All River Access Sites	0	6	0.01	0.13	0.00	0.01	0	14	0.01	0.21	0.01	0.02

CI = confidence interval; SD = standard deviation

Table 87. Type of Day Summary of Other Watercraft above Fairview Dam – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	0	6	0.00	0.10	0.00	0.01	0	8	0.01	0.17	0.01	0.01
Brush Creek Dispersed Camping	0	1	0.00	0.01	0.00	0.00	0	3	0.00	0.03	0.00	0.00
Willow Point Whitewater Take-out	0	0	0.00	0.00	0.00	0.00	0	1	0.00	0.01	0.00	0.00
All River Access Sites	0	6	0.00	0.06	0.00	0.00	0	8	0.00	0.10	0.00	0.00

CI = confidence interval; SD = standard deviation

Table 88. Type of Day Summary of Watercraft (All Types) above Fairview Dam – Descriptive Statistics

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	0	6	0.02	0.27	0.02	0.03	0	8	0.06	0.42	0.05	0.06
Brush Creek Dispersed Camping	0	4	0.00	0.07	0.00	0.00	0	14	0.01	0.18	0.00	0.01
Willow Point Whitewater Take-out	0	6	0.00	0.10	0.00	0.00	0	6	0.01	0.15	0.01	0.01
All River Access Sites	0	6	0.01	0.17	0.01	0.01	0	14	0.02	0.28	0.02	0.03

CI = confidence interval; SD = standard deviation

Table 89. Type of Day Occupancy Pattern above Fairview Dam – Kayaks

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	1	4	2.16	0.92	1.98	2.35	1	8	1.87	1.13	1.70	2.05
Brush Creek Dispersed Camping	1	4	3.15	1.21	2.49	3.81	1	8	2.88	1.90	2.14	3.62
Willow Point Whitewater Take-out	1	6	2.25	1.67	1.09	3.41	1	4	1.65	0.80	1.36	1.93
All River Access Sites	1	6	2.28	1.06	2.09	2.48	1	8	1.95	1.25	1.79	2.12

CI = confidence interval; SD = standard deviation

Table 90. Type of Day Occupancy Pattern above Fairview Dam – Rafts

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	1	6	2.21	1.25	2.03	2.39	1	6	2.39	1.21	2.26	2.52
Brush Creek Dispersed Camping	1	2	1.60	0.55	1.12	2.08	1	14	2.62	2.74	1.56	3.67
Willow Point Whitewater Take-out	1	6	2.10	1.58	1.54	2.65	1	6	2.05	1.32	1.72	2.38
All River Access Sites	1	6	2.18	1.29	2.01	2.35	1	14	2.35	1.38	2.22	2.49

CI = confidence interval; SD = standard deviation

Table 91. Type of Day Occupancy Pattern above Fairview Dam – Other Watercraft

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	1	6	2.09	0.63	1.94	2.25	1	8	2.06	1.30	1.82	2.30
Brush Creek Dispersed Camping	1	1	1.00	0.00	1.00	1.00	1	3	1.56	0.73	1.08	2.03
Willow Point Whitewater Take-out	0	0	0.00	0.00	0.00	0.00	1	1	1.00	0.00	1.00	1.00
All River Access Sites	1	6	2.08	0.64	1.92	2.23	1	8	2.00	1.26	1.78	2.22

CI = confidence interval; SD = standard deviation

Table 92. Type of Day Occupancy Pattern above Fairview Dam – All Types of Watercraft

Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Johnsondale Bridge River Access	1	6	2.48	1.20	2.35	2.62	1	8	2.56	1.27	2.45	2.67
Brush Creek Dispersed Camping	1	4	2.63	1.30	2.05	3.22	1	14	2.70	2.30	2.10	3.30
Willow Point Whitewater Take-out	1	6	2.18	1.59	1.68	2.69	1	6	1.99	1.20	1.74	2.24
All River Access Sites	1	6	2.46	1.25	2.33	2.59	1	14	2.49	1.39	2.39	2.60

CI = confidence interval; SD = standard deviation

5.3. NFKR BELOW THE KR3 POWERHOUSE

Table 93 lists the relative percentage for each type of watercraft recorded by the two cameras at the KR3 Powerhouse Whitewater Put-in/Take-out.

Table 93. Relative Percentage of Watercraft Types at the KR3 Powerhouse Whitewater Put-in/Take-out

Camera/Site	Small Kayaks	Large Kayaks	Small Rafts	Large Rafts	Other
Camera 15/17 (North-upstream view)	34.4%	0.1%	37.4%	9.3%	18.8%
Camera 16/18 (South-downstream view)	20.6%	0.4%	26.5%	42.2%	10.4%
KR3 Powerhouse Whitewater Put-in/Take-out	24.1%	0.3%	29.2%	33.9%	12.5%

KR3 = Kern River No. 3

The following tables provide descriptive statistics and occupancy patterns for watercraft above Fairview Dam:

- Annual descriptive statistics: Table 94, Table 95, Table 96, and Table 97
- Annual occupancy patterns: Table 98, Table 99, Table 100, and Table 101
- Seasonal descriptive statistics: Table 102, Table 103, Table 104, and Table 105
- Seasonal occupancy patterns: Table 106, Table 107, Table 108, and Table 109
- Type of day descriptive statistics: Table 110, Table 111, Table 112, and Table 113
- Type of day occupancy patterns: Table 114, Table 115, Table 116, and Table 117

Table 94. Kayaks at the KR3 Powerhouse Whitewater Put-in/Take-out – Annual Descriptive Statistics

Camera/Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	0	8	0.01	0.21	0.01	0.02
Camera 16/18 (South-downstream view)	0	8	0.03	0.26	0.02	0.03
Combined KR3 Powerhouse Whitewater Put-in/Take-out	0	8	0.02	0.24	0.02	0.02

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 95. Rafts at the KR3 Powerhouse Whitewater Put-in/Take-out – Annual Descriptive Statistics

Camera/Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	0	17	0.02	0.27	0.02	0.02
Camera 16/18 (South-downstream view)	0	20	0.09	0.58	0.08	0.09
Combined KR3 Powerhouse Whitewater Put-in/Take-out	0	20	0.05	0.45	0.05	0.06

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 96. Other Watercraft at the KR3 Powerhouse Whitewater Put-in/Take-out – Annual Descriptive Statistics

Camera/Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	0	15	0.01	0.18	0.01	0.01
Camera 16/18 (South-downstream view)	0	15	0.01	0.25	0.01	0.02
Combined KR3 Powerhouse Whitewater Put-in/Take-out	0	15	0.01	0.22	0.01	0.01

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 97. Watercraft (All Types) at the KR3 Powerhouse Whitewater Put-in/Take-out – Annual Descriptive Statistics

Camera/Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	0	17	0.04	0.39	0.04	0.04
Camera 16/18 (South-downstream view)	0	20	0.13	0.72	0.12	0.13
Combined KR3 Powerhouse Whitewater Put-in/Take-out	0	20	0.08	0.57	0.08	0.09

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 98. Kayak Annual Occupancy Pattern at the KR3 Powerhouse Whitewater Put-in/Take-out

Camera/Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	1	8	2.14	1.48	1.98	2.30

Camera/Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 16/18 (South-downstream view)	1	8	1.88	1.12	1.79	1.96
Combined KR3 Powerhouse Whitewater Put-in/Take-out	1	8	1.96	1.26	1.89	2.04

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 99. Raft Annual Occupancy Pattern at the KR3 Powerhouse Whitewater Put-in/Take-out

Camera/Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	1	17	2.08	1.84	1.92	2.25
Camera 16/18 (South-downstream view)	1	20	2.42	1.91	2.34	2.51
Combined KR3 Powerhouse Whitewater Put-in/Take-out	1	20	2.35	1.90	2.27	2.43

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 100. Other Watercraft Annual Occupancy Pattern at the KR3 Powerhouse Whitewater Put-in/Take-out

Camera/Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	1	15	2.22	2.15	1.91	2.53
Camera 16/18 (South-downstream view)	1	15	2.72	2.41	2.42	3.03
Combined KR3 Powerhouse Whitewater Put-in/Take-out	1	15	2.51	2.31	2.29	2.73

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 101. Watercraft (All Types) Annual Occupancy Pattern at the KR3 Powerhouse Whitewater Put-in/Take-out

Camera/Site	Minimum	Maximum	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	1	17	2.25	1.85	2.13	2.36
Camera 16/18 (South-downstream view)	1	20	2.56	2.00	2.48	2.64
Combined KR3 Powerhouse Whitewater Put-in/Take-out	1	20	2.47	1.96	2.41	2.54

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 102. Seasonal Summary of Kayaks at the KR3 Powerhouse Whitewater Put-in/Take-out – Descriptive Statistics

Camera/Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	0	8	0.03	0.31	0.02	0.03	0	7	0.01	0.14	0.01	0.01
Camera 16/18 (South-downstream view)	0	7	0.06	0.39	0.05	0.07	0	8	0.01	0.14	0.01	0.01
Combined KR3 Powerhouse Whitewater Put-in/Take-out	0	8	0.04	0.35	0.04	0.05	0	8	0.01	0.14	0.01	0.01

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 103. Seasonal Summary of Rafts at the KR3 Powerhouse Whitewater Put-in/Take-out – Descriptive Statistics

Camera/Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	0	8	0.02	0.24	0.02	0.03	0	17	0.02	0.28	0.01	0.02
Camera 16/18 (South-downstream view)	0	20	0.20	0.87	0.19	0.21	0	18	0.03	0.31	0.02	0.03
Combined KR3 Powerhouse Whitewater Put-in/Take-out	0	20	0.11	0.65	0.10	0.12	0	18	0.02	0.29	0.02	0.02

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 104. Seasonal Summary of Other Watercraft at the KR3 Powerhouse Whitewater Put-in/Take-out – Descriptive Statistics

Camera/Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	0	10	0.02	0.23	0.01	0.02	0	15	0.00	0.15	0.00	0.01
Camera 16/18 (South-downstream view)	0	12	0.01	0.25	0.01	0.02	0	15	0.01	0.26	0.01	0.02
Combined KR3 Powerhouse Whitewater Put-in/Take-out	0	12	0.01	0.24	0.01	0.02	0	15	0.01	0.21	0.01	0.01

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 105. Seasonal Summary of Watercraft (All Types) at the KR3 Powerhouse Whitewater Put-in/Take-out – Descriptive Statistics

Camera/Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	0	10	0.06	0.46	0.06	0.07	0	17	0.03	0.35	0.03	0.03
Camera 16/18 (South-downstream view)	0	20	0.27	1.03	0.26	0.29	0	18	0.05	0.44	0.04	0.05
Combined KR3 Powerhouse Whitewater Put-in/Take-out	0	20	0.17	0.81	0.16	0.18	0	18	0.04	0.39	0.04	0.04

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 106. Seasonal Occupancy Pattern at the KR3 Powerhouse Whitewater Put-in/Take-out – Kayaks

Camera/Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	1	8	2.28	1.66	2.06	2.51	1	7	1.92	1.12	1.73	2.11
Camera 16/18 (South-downstream view)	1	7	1.94	1.13	1.85	2.04	1	8	1.66	1.07	1.50	1.82
Combined KR3 Powerhouse Whitewater Put-in/Take-out	1	8	2.04	1.31	1.94	2.13	1	8	1.78	1.10	1.65	1.90

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 107. Seasonal Occupancy Pattern at the KR3 Powerhouse Whitewater Put-in/Take-out – Rafts

Camera/Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	1	8	1.79	1.33	1.61	1.97	1	17	2.31	2.14	2.06	2.57
Camera 16/18 (South-downstream view)	1	20	2.58	1.89	2.48	2.68	1	18	1.93	1.89	1.76	2.11
Combined KR3 Powerhouse Whitewater Put-in/Take-out	1	20	2.47	1.85	2.38	2.56	1	18	2.08	1.99	1.93	2.23

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 108. Seasonal Occupancy Pattern at the KR3 Powerhouse Whitewater Put-in/Take-out – Other Watercraft

Camera/Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	1	10	2.09	1.74	1.79	2.40	1	15	2.52	2.91	1.74	3.29
Camera 16/18 (South-downstream view)	1	12	2.74	2.43	2.21	3.27	1	15	2.72	2.41	2.35	3.09
Combined KR3 Powerhouse Whitewater Put-in/Take-out	1	12	2.34	2.05	2.06	2.62	1	15	2.67	2.53	2.33	3.01

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 109. Seasonal Occupancy Pattern at the KR3 Powerhouse Whitewater Put-in/Take-out – All Watercraft

Camera/Site	Peak Whitewater Boating Season (April-July)						Rest of Year (August-March)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	1	10	2.15	1.64	2.01	2.29	1	17	2.36	2.07	2.17	2.56
Camera 16/18 (South-downstream view)	1	20	2.72	1.98	2.63	2.81	1	18	2.16	1.98	2.02	2.31
Combined KR3 Powerhouse Whitewater Put-in/Take-out	1	20	2.59	1.92	2.51	2.67	1	18	2.24	2.02	2.12	2.36

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 110. Type of Day Summary of Kayaks at the KR3 Powerhouse Whitewater Put-in/Take-out – Descriptive Statistics

Camera/Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	0	8	0.01	0.16	0.01	0.01	0	8	0.02	0.26	0.02	0.03
Camera 16/18 (South-downstream view)	0	7	0.02	0.19	0.01	0.02	0	8	0.04	0.33	0.04	0.05
Combined KR3 Powerhouse Whitewater Put-in/Take-out	0	8	0.01	0.18	0.01	0.01	0	8	0.03	0.30	0.03	0.03

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 111. Type of Day Summary of Rafts at the KR3 Powerhouse Whitewater Put-in/Take-out – Descriptive Statistics

Camera/Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	0	17	0.01	0.24	0.01	0.02	0	17	0.03	0.29	0.02	0.03
Camera 16/18 (South-downstream view)	0	20	0.05	0.44	0.05	0.06	0	18	0.13	0.72	0.12	0.14
Combined KR3 Powerhouse Whitewater Put-in/Take-out	0	20	0.03	0.36	0.03	0.04	0	18	0.08	0.55	0.07	0.08

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 112. Type of Day Summary of Other Watercraft at the KR3 Powerhouse Whitewater Put-in/Take-out – Descriptive Statistics

Camera/Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	0	7	0.00	0.09	0.00	0.01	0	15	0.01	0.25	0.01	0.02
Camera 16/18 (South-downstream view)	0	15	0.01	0.24	0.01	0.01	0	12	0.02	0.27	0.02	0.02
Combined KR3 Powerhouse Whitewater Put-in/Take-out	0	15	0.01	0.18	0.00	0.01	0	15	0.02	0.26	0.01	0.02

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 113. Type of Day Summary of Watercraft (All Types) at the KR3 Powerhouse Whitewater Put-in/Take-out – Descriptive Statistics

Camera/Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	0	17	0.03	0.31	0.02	0.03	0	17	0.06	0.48	0.05	0.07
Camera 16/18 (South-downstream view)	0	20	0.08	0.56	0.07	0.08	0	18	0.19	0.88	0.18	0.21
Combined KR3 Powerhouse Whitewater Put-in/Take-out	0	20	0.05	0.45	0.05	0.06	0	18	0.13	0.70	0.12	0.13

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 114. Type of Day Occupancy Pattern at the KR3 Powerhouse Whitewater Put-in/Take-out – Kayaks

Camera/Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	1	8	2.20	1.67	1.88	2.52	1	8	2.11	1.38	1.94	2.29
Camera 16/18 (South-downstream view)	1	7	1.71	1.12	1.57	1.85	1	8	1.97	1.12	1.87	2.07
Combined KR3 Powerhouse Whitewater Put-in/Take-out	1	8	1.85	1.32	1.72	1.99	1	8	2.02	1.22	1.93	2.11

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 115. Type of Day Occupancy Pattern at the KR3 Powerhouse Whitewater Put-in/Take-out – Rafts

Camera/Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	1	17	2.23	2.04	1.94	2.52	1	17	1.98	1.70	1.79	2.18
Camera 16/18 (South-downstream view)	1	20	2.21	1.78	2.08	2.34	1	18	2.56	1.98	2.44	2.68
Combined KR3 Powerhouse Whitewater Put-in/Take-out	1	20	2.22	1.83	2.10	2.34	1	18	2.44	1.94	2.34	2.54

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 116. Type of Day Occupancy Pattern at the KR3 Powerhouse Whitewater Put-in/Take-out – Other Watercraft

Camera/Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	1	7	1.42	0.92	1.24	1.61	1	15	3.04	2.70	2.48	3.61
Camera 16/18 (South-downstream view)	1	15	3.74	3.50	2.87	4.61	1	12	2.38	1.78	2.12	2.64
Combined KR3 Powerhouse Whitewater Put-in/Take-out	1	15	2.36	2.58	1.95	2.77	1	15	2.60	2.14	2.34	2.85

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

Table 117. Type of Day Occupancy Pattern at the KR3 Powerhouse Whitewater Put-in/Take-out – All Types of Watercraft

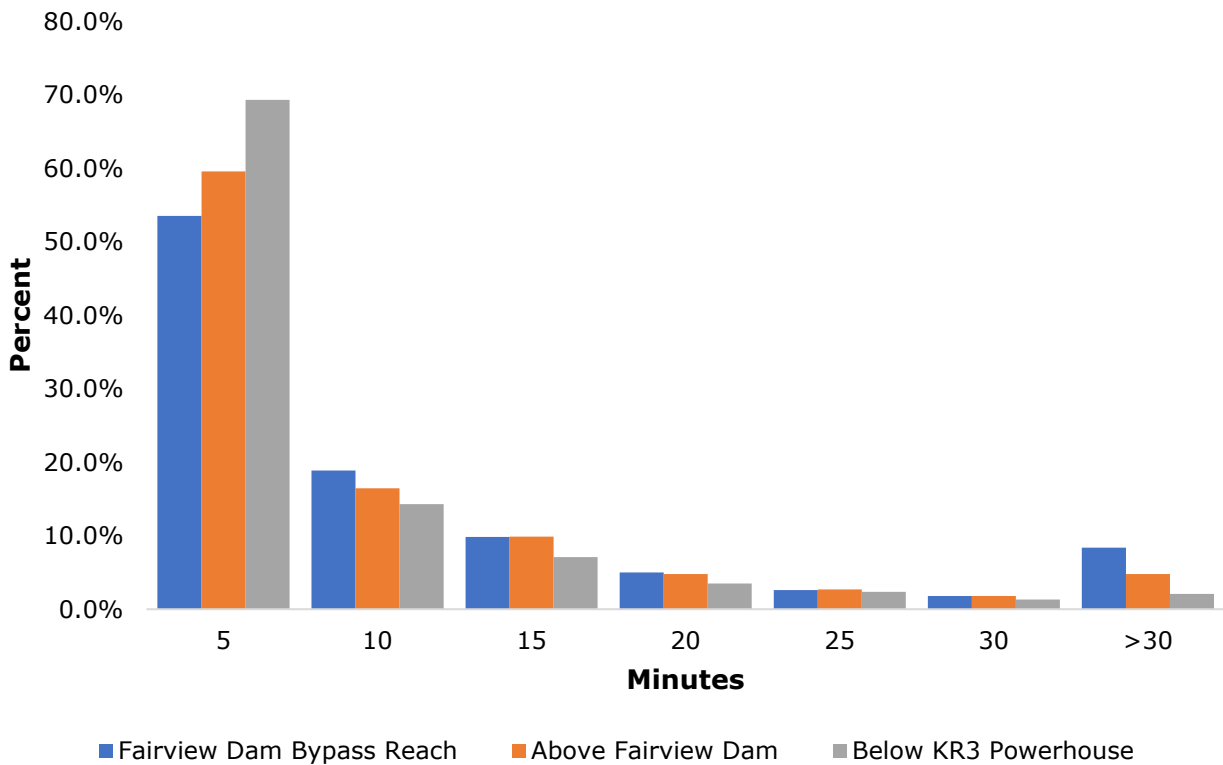
Camera/Site	Weekdays (Monday-Thursday)						Weekend Days (Friday-Sunday)					
	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound	Min	Max	Average	SD	95% CI Lower Bound	95% CI Upper Bound
Camera 15/17 (North-upstream view)	1	17	2.12	1.81	1.93	2.30	1	17	2.33	1.87	2.18	2.48
Camera 16/18 (South-downstream view)	1	20	2.38	1.99	2.25	2.51	1	18	2.67	2.00	2.57	2.77
Combined KR3 Powerhouse Whitewater Put-in/Take-out	1	20	2.30	1.94	2.20	2.41	1	18	2.57	1.97	2.49	2.66

CI = confidence interval; KR3 = Kern River No. 3; SD = standard deviation

6.0 WATERCRAFT DURATION/LENGTH OF STAY

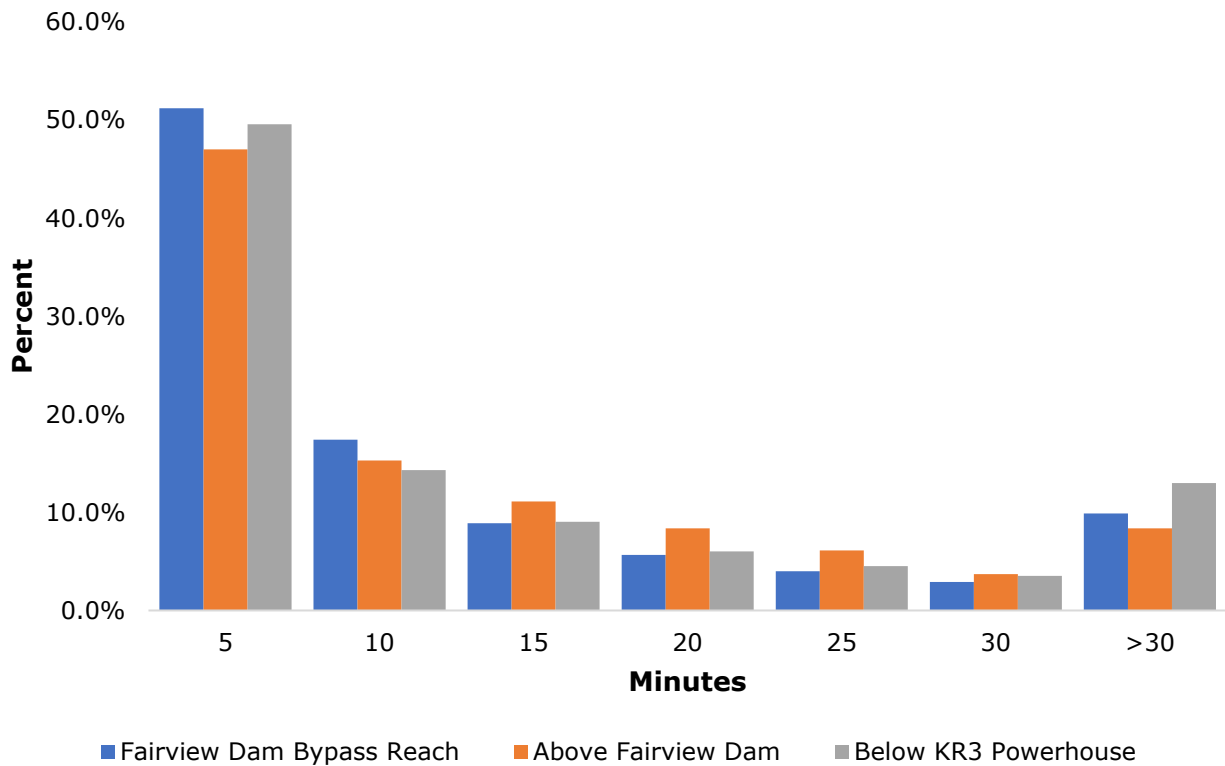
A length of stay was calculated for kayaks and rafts to help determine the duration of time spent on site for each type of boat (i.e., the time from when a boat first appears to when it is no longer in frame in consecutive photographs). This was done by calculating the number of consecutive photographs with a similar boat count at each river access site.

Figure 10 and Figure 11 display the frequency distributions for length of stay for kayaks and rafts, respectively, at the river access sites in the Fairview Dam Bypass Reach, above Fairview Dam, and below the KR3 Powerhouse. Frequency distributions describe the most frequently observed watercraft length of stay (duration) in the photographs.



KR3 = Kern River No. 3

Figure 10. Length of Stay Frequency Distribution for Kayaks.



KR3 = Kern River No. 3

Figure 11. Length of Stay Frequency Distribution for Rafts.

Table 118 lists the annual and whitewater season average lengths of stay for kayaks and rafts.

Table 118. Kayak and Raft Length of Stay (minutes)

Location/Site	Annual		Peak Whitewater Season	
	Kayaks	Rafts	Kayaks	Rafts
Fairview Dam Bypass Reach				
Upstream of Roads End Picnic Site	11.6	9.3	15.0	11.4
Roads End Picnic Site and Whitewater Put-in	19.3	18.7	12.2	18.2
Calkins Flat Dispersed Camping	9.6	8.2	9.7	8.2
Ant Canyon Dispersed Camping	7.6	8.1	6.0	8.1
Corral Creek Picnic Site and Whitewater Take-out	10.3	15.0	10.3	15.0
Thunderbird Whitewater Put-in/Take-out	8.3	7.1	8.2	7.0
Camp 3 Whitewater Put-in/Take-out	8.5	6.5	8.1	6.6
Riverkern Beach Picnic Site	8.1	10.5	8.8	12.1
Above Fairview Dam				
Johnsondale Bridge River Access	9.0	11.8	9.7	12.8
Brush Creek Dispersed Camping	6.8	5.7	13.8	5.8
Willow Point Whitewater Take-out	7.0	8.5	5.4	10.3

Location/Site	Annual		Peak Whitewater Season	
	Kayaks	Rafts	Kayaks	Rafts
Below KR3 Powerhouse				
KR3 Powerhouse Whitewater Put-in/Take-out (North-upstream view)	6.5	6.0	6.6	6.5
KR3 Powerhouse Whitewater Put-in/Take-out (South-downstream view)	7.6	10.6	8.2	11.8

KR3 = Kern River No. 3

7.0 COMMERCIAL USE AI FLAG

As noted in the *REC-2 Recreation Facilities Use Assessment Camera Study Plan* (SCE, 2024), SCE used the AI tool to initially flag photographs that were flagged as having "likely commercial" activity based on several object identifiers including large groups of people, buses, vans, large rafts, and branded equipment. Over the year-long study, the AI tool flagged approximately 14 percent of all photographs with watercraft¹ at the 13 river access sites as having commercial activity in frame (1,497 photographs of 10,826). About 93 percent of these flagged photographs (1,393 of 1,497) were from the peak whitewater boating season (April 1 through July 31). Table 119 lists the relative percent of photographs with watercraft at each river access site during the year-long study, the percent of these photographs with watercraft flagged as having commercial use (AI flag), and the corresponding percent of photographs with watercraft without the commercial flag.

Table 119. Annual Summary of Photographs With and Without the AI Commercial Flag (Percent)

	Relative Percent of Photos with Watercraft ^a	Watercraft Photos with Commercial Flag ^b (%)	Watercraft Photos without Commercial Flag ^b (%)
Bypass Reach			
Upstream of Roads End Picnic Site	4.8%	0.0%	100.0%
Roads End Picnic Site and Whitewater Put-in	3.7%	20.1%	79.9%
Calkins Flat Dispersed Camping	13.2%	0.0%	100.0%
Ant Canyon Dispersed Camping	0.8%	7.8%	92.2%
Corral Creek Picnic Site and Whitewater Take-out	3.4%	1.4%	98.6%
Thunderbird Whitewater Put-in/Take-out	4.8%	5.2%	94.8%
Camp 3 Whitewater Put-in/Take-out	0.8%	43.4%	56.6%
Riverkern Beach Picnic Site	27.6%	10.9%	89.1%
<i>Subtotal</i>	59.1%	7.5%	92.5%

¹ As noted in Section 5.1, 1.6 percent of all photographs included at least one recorded watercraft.

	Relative Percent of Photos with Watercraft ^a	Watercraft Photos with Commercial Flag ^b (%)	Watercraft Photos without Commercial Flag ^b (%)
Above Fairview Dam			
Johnsondale Bridge River Access	7.4%	19.3%	80.8%
Brush Creek Dispersed Camping	0.7%	2.6%	97.4%
Willow Point Whitewater Take-out	1.2%	14.3%	85.7%
<i>Subtotal</i>	9.3%	17.4%	82.6%
Below KR3 Powerhouse			
KR3 Powerhouse Whitewater Put-in/Take-out (North-upstream view)	8.8%	1.9%	98.1%
KR3 Powerhouse Whitewater Put-in/Take-out (South-downstream view)	22.9%	33.3%	66.7%
<i>Subtotal</i>	31.7%	24.6%	75.4%
Total	100%	13.8%	86.2%

KR3 = Kern River No. 3

Notes:

^a Relative percent of total photographs at all river access sites with at least 1 recorded watercraft.

^b Percent of photographs with watercraft at each site with or without the AI commercial flag.

The AI was highly effective with this initial screen (i.e., identifying photographs with commercial use), but its primary function was binary; that is, it only identified the presence of commercial use based on a set of indicators in a photograph rather than providing a count of commercial and non-commercial individual boats or boaters. While the AI-supported counts do not specifically provide a record of commercial and non-commercial use, the resulting watercraft counts from each photograph may be used to estimate each type of use (see watercraft type and boater discussion above).

While the AI flag provided a high-precision baseline of photographs with and without potential commercial use, the human validated QA/QC process revealed that it was conservative in its estimates and tended to under-flag photographs with potential commercial use. Additionally, while photographs with the AI commercial flag may have had a higher likelihood of commercial use, it did not preclude these same photographs from having indicators of private, non-commercial use. As such, SCE employed a sampling and corresponding human validation process of commercial and non-commercial watercraft in photographs with watercraft from 56 days across seven high-use river access sites between March 1 and June 15, 2025. The results of this process and corresponding estimate of commercial and non-commercial whitewater boating use are provided in Section 5.4, *Commercial and Non-Commercial Whitewater Boating Estimate*, of the Camera Study Addendum.

8.0 REFERENCES

SCE (Southern California Edison). 2024. *Kern River No. 3 Hydroelectric Project, FERC Project No. 2290-122; Final License Application*. Accession No. 20241122-5261. Filed with FERC on November 22, 2024.