

Visitors to the City of Fort Collins Poudre River Natural Areas

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Executive Summary

The City of Fort Collins conducted self-administered visitor interviews ($n = 1,103$) at four natural areas that border the Poudre River. Of the completed surveys, 259 were from Arapaho Bend, 300 were conducted at Riverbend Ponds, 256 at the Shields Street River Access, and 148 at Salyer. This report compares the visitors to the four natural areas in terms of their (1) demographics, (2) place of residence, (3) visitation patterns, (4) primary activities, (5) group characteristics, (6) visitor satisfaction, and (7) perceived river safety.

Demographics (Table 2)

- More females (51% to 57%) than males (43% to 49%) completed the survey, but the distributions did not differ statistically among the four natural areas.
- Average visitor ages ranged from 44.88 (Salyer) to 48.90 (Riverbend Ponds).
- Over 80% were not Hispanic or Latino, and over 89% were white.
- More than two-thirds of all visitors held a bachelor's degree or higher.
- Between 31% (Shields Street River Access) and 43% (Arapaho) reported a household annual income over \$100,000.

Residence (Tables 3 to 5)

- Over 85% of all visitors were residents of Larimer County.
- On average, Salyer visitors had lived in the county slightly longer ($M = 17.09$) than visitors at Riverbend Ponds ($M = 15.90$), Shields Street River Access ($M = 16.16$), or Arapaho Bend ($M = 16.49$).
- About 10% of respondents had lived in Larimer County for one year or less; about 15% had lived in the county for more than 31 years.
- Overall, about 80% of the visitors lived in Fort Collins. Windsor, Wellington and Timnath combined accounted for 6% of the visitation. The remaining visitation came from other locations in Colorado (8%) or other locations in the U.S. (4%).

Visitation Patterns (Table 6)

- Respondents at Salyer ($M = 53.12$) and Riverbend Ponds ($M = 50.45$) visited more frequently than those at Shields Street River Access ($M = 32.48$) and Arapaho Bend ($M = 29.96$).
- A few respondents at Salyer, Riverbend Ponds and Shields Street River Access visited every day of the year.
- Thirteen percent of visitors at Salyer and 12% at Riverbend Ponds reported 100+ annual visits.

Primary Activities (Tables 7 to 10)

- Across all four locations, dog walking (28%) and hiking (24%) were the two most popular primary activities.
- Over 10% of all visitors listed mountain biking (12%) and trail running (11%) as their primary activity.
- The least commonly reported primary activities were picnicking (3%) and kayaking (2%).
- A somewhat similar pattern of reported primary activities was observed at each of the specific natural areas.

Group Characteristics (Table 11 – 12)

- Most respondents were alone on the day they were interviewed.
- Among those who visited with a group, the average number of adults in the group was ≤ 1.80 .
- Over three-quarters of respondents at all areas did not have any children in the group.
- Dog walkers and trail runners were more likely to be alone. Hikers and mountain bikers were more likely to be in a group.

Visitor Satisfaction (Tables 13 – 17)

- The survey asked respondents to rate the quality of five facilities (i.e., restrooms, parking areas, picnic areas, trash receptacles, kiosk information, trails).
- Among those who used the facilities at the natural areas, over 50% of all visitors rated all facilities as good or very good.
- Across all five facilities, Shields Street River Access had the highest average rating (88%), followed by Riverbend Ponds (84%), Arapaho Bend (82%) and Salyer (71%).
- Most individuals rated their overall experience as excellent: 56% at Salyer, 60% at Arapaho Bend, 64% at Riverbend Ponds, and 73% at Shields Street River Access.
- When the good and excellent response categories were combined, the percentages were 95% or higher.

River Safety (Tables 18 – 19)

- Most individuals at Arapaho Bend (51%), Riverbend Ponds (59%), and Shields Street River Access (54%) believed their river experiences were “always safe.”
- When the “usually safe” rating was combined with the “always safe” rating, percentages increased to 93% plus.
- An open-ended question asked visitors to explain why they gave these ratings. Problems with transient individuals was the most frequently mentioned issue ($n = 88$), followed by the need for more bike patrols ($n = 32$).

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Introduction

Natural resource management agencies strive to provide high quality recreation experiences (Decker et al., 2001). Not all visitors, however, share the same set of preferences for setting attributes, facilities, and services offered. Some individuals, for example, desire nothing more than the opportunity to enjoy nature, hike, and watch wildlife; activities that require only a natural setting with minimal agency provided facilities or services. Other visitors are more demanding in the services they believe should be offered (Donnelly et al., 1996).

Recognizing this diversity of desires found among recreationists, researchers and managers have attempted to differentiate users into more homogeneous groups (Bryan, 1977). Segmentation strategies have been developed that evaluate the benefits sought by individuals in a variety of situations or occasions. For example, several studies highlight the importance of segmenting visitors based on geographic location (e.g., Vaske, 2019a, 2019b). This report compared visitors to four City of Fort Collins Poudre River natural areas.

Study Objectives

This project sought to better understand visitors to City of Fort Collins Poudre River natural areas. More specifically, the objectives were to describe visitors in terms of their:

1. Demographic characteristics (e.g., sex, age, ethnicity, race, education, income)
2. Place of residence (e.g., residents of Larimer County)
3. Visitation patterns (e.g., visiting alone vs. in a group, frequency of visitation)
4. Activity participation (e.g., primary activities)
5. Visitor satisfaction (e.g., with the facilities and overall experience)
6. Perceived river safety.

The intent was to (a) provide managers with baseline information (b) to inform management decisions.

Methods

The City of Fort Collins conducted visitor surveys at four natural areas (Arapaho Bend, Riverbend Ponds, Shields Street River Access, Salyer) that border the Poudre River. Data were obtained from a multistage stratified-cluster design (see Vaske, 2019c for details). This method begins by dividing the sample population into relevant strata (i.e., the four natural areas access areas). The cluster portion involved identifying appropriate groups or blocks. In this study, the clusters were the sampling time blocks (i.e., 8:00 – 9:45, 10:15 – 12:00, 12:30 – 1:45, 2:15 – 4:15, see Table 1). Once the strata (i.e., access locations) and clusters (i.e., four-time blocks per day) were defined, the third step randomly selected access locations and time blocks (i.e., clusters) to be sampled. Visitors within each area and time block were asked to voluntarily complete the survey.

Data Analysis

In this report, two types of statistics are presented: (a) Chi-square (χ^2) and (b) *F*-values.

The choice of statistic depends on how the dependent variable was coded, for example:

if the dependent variable was dichotomous (e.g., male vs. female) or categorical (level of education), χ^2 was used.

if the dependent variable was continuous (e.g., number of people in a group), *F* was used.

The independent variable was typically categorical (e.g., location of the interview).

If the *p*-value for a given statistic was $\leq .05$, the groups being compared differ statistically.

The χ^2 and *F*-values highlight when differences exist, but do not indicate the strength of the relationship.

The latter is shown via two effect size measures:

(a) Cramer's *V* (or simply *V*) for χ^2 and

(b) eta (η) for *F*-values.

The cut points for these two effect sizes are:

for *V*: .1 = a minimal relationship, .3 = a typical relationship, and .5 = a substantial relationship

for η : .1 = a minimal relationship, .243 = a typical relationship, and .371 = a substantial relationship.

A total of 1,103 surveys were completed by visitors to the Poudre River (Table 1). Of these, 259 surveys were completed at Arapaho, 300 at Riverbend Ponds, 256 at the Shields Street River Access, and 148 at Salyer. Depending on the location, between 80% (Shields Street River Access) and 89% (Arapaho Bend) of the surveys were distributed in 2019. The interviews were distributed during July through December and each day of the week.

Table 1. City of Fort Poudre River survey data collection effort

	Arapaho Bend (<i>n</i> = 259) %	Riverbend Ponds (<i>n</i> = 300) %	Shields Street River Access (<i>n</i> = 256) %	Salyer (<i>n</i> = 148) %
Year				
2019	89	84	80	83
2020	11	16	20	17
Month				
July	11	16	20	22
August	20	16	22	25
September	17	28	15	23
October	30	14	16	15
November	16	22	16	14
December	7	5	10	1
Day of Week				
Monday	12	12	13	9
Tuesday	10	5	4	7
Wednesday	10	10	5	6
Thursday	9	9	12	13
Friday	9	11	20	18
Saturday	26	18	24	13
Sunday	24	35	22	34
Shift (i.e., cluster)				
8:00 – 9:45	17	36	16	20
10:15 – 12:00	36	35	12	22
12:30 – 1:45	12	12	43	6
2:15 – 4:15	35	17	29	52

Results

Slightly more females (51% to 57%) were sampled than males (43% to 49%), but the distributions did not statistically vary among the four natural areas (Table 2). Average visitor ages ranged from 44.88 (Salyer) to 48.90 (Riverbend Ponds). Over 80% were not Hispanic or Latino and over 89% were white. More than two-thirds of all visitors held a bachelor's degree or higher. Between 31% (Shields Street River Access) and 43% (Arapaho) reported a household annual income over \$100,000. Although half of the statistical comparisons among the four natural areas were significant, all the effect sizes were minimal or less.

Table 2. Demographic profile of visitors to City of Fort Collins Poudre River natural areas

	City of Fort Collins Poudre River Natural Areas ¹				Statistic χ^2 or <i>F</i> - value	<i>p</i> -value	Effect size <i>V</i> or η
	Arapaho Bend %	Riverbend Ponds %	Shields Street River Access %	Salyer %			
Gender					1.70	.638	.039
Male	47	43	46	49			
Female	53	57	54	51			
Age					45.03	< .001	.115
< 25	8	4	12	12			
25 to 34	14	22	23	23			
35 to 44	27	16	13	19			
45 to 54	19	18	16	15			
55 to 64	17	17	19	13			
65 +	16	23	17	18			
Mean age	46.74	48.90	45.90	44.88	3.20	.023	.093
Ethnicity					12.25	.057	.074
Hispanic or Latino	4	3	6	7			
Not Hispanic or Latino	88	90	86	81			
Prefer not to self-identify	8	7	8	12			
Race ²					13.98	.527	.065
White	94	93	93	89			
Black	< 1	1	< 1	< 1			
Asian	2	1	1	1			
American Indian	< 1	1	< 1	3			
Native Hawaiian	< 1	0	< 1	0			
Two or more races							
Highest Level of Education					29.88	.003	.097
Some high school or less	1	1	2	3			
High school	8	9	13	18			
Associate degree	13	9	12	13			
Bachelor's degree	39	40	42	31			
Masters / Ph.D.	39	41	32	35			
Household Income					49.64	< .001	.122
Less than \$24,999	4	5	14	12			
\$25,000 – \$34,999	8	4	4	8			
\$35,000 – \$49,999	10	15	12	14			
\$50,000 – \$74,999	20	19	20	16			
\$75,000 – \$99,999	15	19	20	14			
\$100,000 – \$149,999	20	22	18	23			
\$150,000 – \$199,999	11	9	6	7			
\$200,000+	12	7	7	7			

1 Cell entries are either percentages or means.

2 Cells entries are the percentage of "yes" responses.

Eighty-five percent or more of all visitors were residents of Larimer County (Table 3). On average, Salyer visitors had lived in the county slightly longer ($M = 17.09$) than visitors at Riverbend Ponds ($M = 15.90$), Shields Street River Access ($M = 16.16$), or Arapaho Bend ($M = 16.49$). Ten percent or fewer had lived in Larimer County for one year or less; about 15% had lived in the county for more than 31 years.

Table 3. Residence of visitors to City of Fort Collins Poudre River natural areas

	City of Fort Collins Poudre River Natural Areas				Statistic χ^2 or F value	<i>p</i> - value	Effect size V or η
	Arapaho Bend %	Riverbend Ponds %	Shields Street River Access %	Salyer %			
Resident of Larimer County					2.41	.492	.047
Yes	88	89	86	85			
No	12	11	14	15			
Years lived in Larimer County					15.15	.651	.072
1 year or less	9	10	6	7			
2 – 3	12	16	17	14			
4 – 5	11	9	10	8			
6 – 10	11	13	20	17			
11 – 20	25	20	20	21			
21 – 30	17	17	15	18			
31+	15	15	14	15			
Range	1 – 77	1 – 62	1 – 72	1 – 68			
Mean	16.49	15.90	16.16	17.09	0.31	.818	.031

Overall, about 80% of the visitors lived in Fort Collins (Table 4). Windsor, Wellington and Timnath combined accounted for 6% of the visitation. The remaining visitation came from other locations in Colorado (8%) or other locations in the U.S. (4%).

Table 4. Primary residences of visitors to City of Fort Collins Poudre River natural areas

	Number	Percent
Fort Collins	867	82
Windsor	27	3
Wellington	17	2
Timnath	11	1
Other locations in Colorado	90	8
Other locations in the U.S.	50	4

Similar distributions were observed for each of the four natural areas (Table 5). Over 80% of the visitors at each location were from Fort Collins. Fewer than 20 people at each natural area were from Windsor, Wellington and Timnath.

Table 5. Primary residences of visitors by natural area

	Arapaho Bend <i>n</i>	Riverbend Ponds <i>n</i>	Shields Street River Access <i>n</i>	Salyer <i>n</i>
Fort Collins	204 (83%)	237 (81%)	202 (81%)	224 (81%)
Windsor	9	5	4	9
Wellington	3	5	7	2
Timnath	6	5	0	0
Other locations in Colorado	17	29	20	24
Other locations in the U.S.	6	13	15	16

The average number of visits varied among the four natural areas (Table 6). For example, respondents at Salyer ($M = 53.12$) and Riverbend Ponds ($M = 50.45$) visited more frequently than those at Shields Street River Access ($M = 32.48$) and Arapaho Bend ($M = 29.96$). Some individuals at Salyer, Riverbend Ponds and Shields Street River Access visited every day of the year. Thirteen percent of visitors at Salyer and 12% at Riverbend Ponds reported 100+ annual visits.

Table 6. Number of visits to City of Fort Collins Poudre River natural areas in the past 12 months

	City of Fort Collins Poudre River Natural Areas				Statistic χ^2 or <i>F</i> value	<i>p</i> - value	Effect Size <i>V</i> or η
	Arapaho Bend %	Riverbend Ponds %	Shields Street River Access %	Salyer %			
Visits per year					26.09	.203	.094
1	11	18	16	16			
2 – 4	23	18	17	19			
5 – 9	16	10	13	10			
10 – 14	9	9	10	10			
15 – 24	12	13	16	11			
25 – 49	13	12	12	12			
50 – 99	11	9	9	11			
100+	5	12	7	13			
Range	1 – 300	1 – 365	1 – 365	1 – 365			
Mean	29.96	50.45	32.48	53.12	6.79	< .001	.139

Across all four locations, dog walking (28%) and hiking (24%) were the two most popular primary activities (Table 7). Over 10% of all visitors listed mountain biking (12%) and trail running (11%) as their primary activity. The least commonly reported primary activities were picnicking (3%) and kayaking (2%).

Table 7. Primary activities at City of Fort Collins Poudre River natural areas on day of interview

	Number	Percent
Dog walking	303	28
Hiking	264	24
Mountain biking	135	12
Trail running	116	11
Fishing	73	7
Rafting – Tubing	63	6
Wildlife viewing	57	5
Photography / Art	40	4
Picnicking	28	3
Kayaking	24	2

A somewhat similar pattern of reported primary activities was observed at each of the specific natural areas (Table 8). Dog walking and hiking were the top two primary activities at Arapaho Bend, Riverbend Ponds, and Shields Street River Access. At Salyer, dog walking (22%), mountain biking (22%) were the first two primary activities, followed by hiking (17%). Picnicking and kayaking were consistently ranked lowest as the visitors' primary activity at each natural area.

Table 8. Primary activities at City of Fort Collins Poudre River by natural area

	City of Fort Collins Poudre River Natural Areas			
	Arapaho Bend %	Riverbend Ponds %	Shields Street River Access %	Salyer %
Dog walking	26	38	23	22
Hiking	27	30	21	17
Mountain biking	6	8	13	22
Trail running	17	7	11	8
Fishing	8	6	8	4
Rafting – Tubing	< 1	2	11	10
Wildlife viewing	7	3	6	5
Photography / Art	5	1	2	6
Picnicking	2	2	3	4
Kayaking	2	2	2	2

$\chi^2 = 153.08, p < .001, \text{Cramer's } V = 210$

The primary activity on weekdays differed among the four natural areas (Table 9). Over half (53%) of the weekday Riverbend Ponds visitors considered dog walking to be their primary activity; about a third of the visitors to the other three areas reported dog walking as a primary activity. Visitors at Salyer were more likely to report mountain biking as their primary activity compared to the other natural areas. On weekdays, less than 20% indicated that trail running was their primary activity at any of the locations.

Table 9. Primary activities on weekdays

	City of Fort Collins Poudre River Natural Areas			
	Arapaho Bend %	Riverbend Ponds %	Shields Street River Access %	Salyer %
Dog walking	33	53	31	30
Hiking	43	30	35	23
Mountain biking	5	9	23	32
Trail running	19	8	12	15

$\chi^2 = 51.79, p = < .001$. Cramer's $V = .205$.

A slightly different pattern emerged for primary activities on weekends (Table 10). About a third of all visitors at all natural areas considered dog walking to be their primary activity. Hiking was more popular at Riverbend Ponds, while mountain biking was mentioned more often as the primary activity at Salyer. Those primarily interested in trail running ranged from 8% at Riverbend Ponds to 25% at Arapaho Bend.

Table 10. Primary activities on weekends

	City of Fort Collins Poudre River Natural Areas			
	Arapaho Bend %	Riverbend Ponds %	Shields Street River Access %	Salyer %
Dog walking	36	39	38	34
Hiking	29	43	26	26
Mountain biking	11	11	15	31
Trail running	25	8	22	10

$\chi^2 = 36.45, p < .001$, Cramer's $V = .177$.

Two-thirds of the respondents at Arapaho Bend had visited alone (Table 11). About half of the individuals at the other three area were alone on the day they were interviewed. The average group size ranged from 1.64 at Arapaho Bend to 2.39 at Salyer. Between 75% (Salyer) and 90% (Arapaho Bend) travelled in groups of two or less. The average number of adults in the group was consistently less than or equal to 1.80. Three-quarters of more of the respondents at all areas did not have any children in the group on the day they were interviewed.

Table 11. Group characteristics of visitors to City of Fort Collins Poudre River natural areas

	City of Fort Collins Poudre River Natural Areas				Statistic χ^2 or F value	p - value	Effect size V or η
	Arapaho Bend %	Riverbend Ponds %	Shields Street River Access %	Salyer %			
I visited the open space					9.45	.024	.092
Alone	63	53	54	50			
With a group	37	47	46	50			
Number of people in group					50.95	< .001	.127
1	63	53	54	50			
2	27	31	26	25			
3	5	7	8	7			
4	3	6	9	8			
5	1	3	1	3			
6+	1	3	1	3			
Range	1 – 13	1 – 7	1 – 15	1 – 20			
Mean	1.64	1.78	1.86	2.39	10.02	< .001	.163
Number of adults in group							
1	70	58	59	58			
2	27	32	28	29			
3	2	4	8	6			
4 – 5	1	6	5	5			
6+	1	0	1	4			
Range	1 – 6	1 – 5	1 – 15	1 – 15			
Mean	1.37	1.60	1.65	1.80	6.54	< .001	.132
Number of children in group					27.02	.001	.093
0	87	88	88	77			
1	5	6	7	8			
2	5	4	4	8			
3+	3	1	1	7			
Range	0 – 7	0 – 4	0 – 8	0 – 13			
Mean	0.27	0.18	0.21	0.59	10.02	< .001	.163

Two-fifths of the dog walkers were alone, compared to a third of those in groups (Table 12). People in groups, however, were more likely to be hikers (38%) or mountain bikers (22%) than those visiting alone (28% vs. 12%, respectively). About a fifth of those trail running was alone, compared to only 7% of those in groups.

Table 12. Primary activity by visited alone or with a group

	Visited:	
	Alone %	With Group %
Dog walking	40	33
Hiking	28	38
Mountain biking	12	22
Trail running	19	7

$\chi^2 = 45.40, p < .001$. Cramer's $V = .231$.

Visitor Satisfaction

Over 90% of the respondents used the parking areas and the trails at each of the four natural areas, with one exception. The exception was Salyer, where 68% used the parking areas (Table 13). Between 63% and 76% of the visitors used the trash receptacles and the kiosks. Other facilities, however, were used less frequently by the visitors. About 40% or less said they used the picnic areas and restrooms

Table 13. Use of facilities at City of Fort Collins Poudre River natural areas

	City of Fort Collins Poudre River Natural Areas				χ^2	<i>p</i> -value	Cramer's <i>V</i>
	Arapaho Bend %	Riverbend Ponds %	Shields Street River Access %	Salyer %			
Restrooms	21	31	40	21	33.27	< .001	.175
Parking areas	94	91	94	68	101.46	< .001	.322
Picnic areas	26	31	40	41	20.06	< .001	.134
Trash receptacles	63	70	66	70	4.12	.249	.061
Kiosk information	70	76	76	68	6.65	.084	.078
Trails	98	100	94	94	30.04	< .001	.141

1. Cell entries are percentages for individuals who used the facilities.

Among those who used the facilities at these natural areas, the perceived quality ratings were quite high (Table 14). More than 50% of all visitors at all areas rated all facilities as good or very good. There was, however, some variance at the different areas. At Shields Street River Access, for example, between 80% (trash receptacles) and 98% (trails) of the visitors rated all facilities as good or very good. Similar high ratings (82%+) were observed at Arapaho Bend, with one exception (restrooms, 54%). At Riverbend Ponds, all ratings were greater than 80% with exception of picnic areas (75%) and trash receptacles (72%). The quality ratings at Salyer were slightly lower; 93% rated the trails as good or very good, but the other ratings were between 51% and 77%.

Table 14. Perceived quality of facilities at City of Fort Collins Poudre River natural areas

	City of Fort Collins Poudre River Natural Areas				χ^2	<i>p</i> -value	Cramer's <i>V</i>
	Arapaho Bend %	Riverbend Ponds %	Shields Street River Access %	Salyer %			
Restrooms	54	83	86	51	38.69	< .001	.355
Parking areas	87	88	92	77	20.85	< .001	.152
Picnic areas	83	75	82	66	10.07	.018	.164
Trash receptacles	82	72	80	67	14.79	.002	.140
Kiosk information	91	92	95	73	49.32	< .001	.262
Trails	93	94	98	93	8.81	.032	.082

1. Cell entries are percentages for “good” and “very good” responses among those who used the facilities.

The overall perceived quality ratings for all four natural areas were extremely positive (Table 15). A majority of individuals rated their experience as excellent. Specifically, 56% at Salyer, 60% at Arapaho Bend, 64% at Riverbend Ponds, and 73% at Shields Street River Access. When the good and excellent response categories are combined, these percentages were 95% or higher.

Table 15. Overall perceived quality of City of Fort Collins natural areas

	City of Fort Collins Natural Area			
	Arapaho Bend %	Riverbend Ponds %	Shields Street River Access %	Salyer %
Very Poor	0	0	0	0
Poor	0	0	0	0
Average	2	4	2	5
Good	38	32	25	39
Excellent	60	64	73	56

$\chi^2 = 26.03, p = .011, V = .018.$

Respondents were provided with two open-ended questions to express their opinions about both the facilities and the overall perceived quality of the experience. These comments are summarized in Tables 16 and 17. Responses in both tables are rank ordered from comments receiving the most mentions to those receiving the fewest remarks.

In general, comments in both tables were positive.

Table 16. Respondents' reasons for facility ratings

	Arapaho Bend	Riverbend Ponds	Shield St River Access	Salyer	Total
Well maintained	37	42	45	32	156
Excellent experience	21	32	23	21	97
Nice trails	14	25	22	22	83
Love this area	11	13	9	17	50
Enjoy walking here	13	13	7	11	44
Need more trash cans	6	15		15	36
Easy access	8	7	13	8	36
All good	7	11	7	7	32
Beautiful	1	8	4	6	19
Great facilities	6	4	5	1	16
Trash problem	3	4	3	4	14
Parking area needs maintenance	6	1	4	2	13
Need more trail maintenance	3	2	3	5	13
Need more restrooms	9		2		11
Restrooms need attention	2	2	3	2	9
Enjoy running here	4	1		3	8
Need dog bags on trail	1	6			7
Need more parking	3	1	2		6
Need a trash can for dog bags	1	5	1	1	8
No restrooms	2	1		2	5
Enjoy walking dog here		4	1		5
Transient population problem				3	3
No picnic area		1	1	1	3
Need cleaner restrooms	2	1			3
Horse waste problem	1		1	1	3
Good parking	1		2		3
Safe		2			2
River signs are helpful			1	1	2
Improved trail system	1	1			2
Good signage			1	1	2
Enjoy biking here			1	1	2
Unsafe in parking area				1	1
Trash cans convenient	1				1
Signs not appropriate for natural areas - too colorful/big				1	1
Signage has improved				1	1
Restroom always clean			1		1
Pave the rest of the path around Rigden Reservoir?	1				1
No trash	1				1

Table 16. Respondents' reasons for facility ratings (continued)

	Arapaho Bend	Riverbend Ponds	Shield St River Access	Salyer	Total
Need water in the restroom			1	1	2
No access to ponds off trail			1		1
Need restroom at the trailhead	1				1
Need permanent restroom	1				1
Need off leash dog area	1				1
Need more signage near the water	1				1
Need more picnic tables		1			1
Need more kiosks				1	1
Need more concrete trails	1				1
Need leash law signs with enforcement fines	1				1
Need consistent gravel trails for running			1		1
Need a connection on west side	1				1
Love the information at the kiosks				1	1
Kiosk materials could use an update				1	1
Enjoy watching wildlife here	1				1
Dog waste problem	1				1
Dog friendly			1		1
Bumpy trails		1			1
Bikers don't warn walkers when passing on the left			1		1
Bike signs are hard to follow				1	1
Avoid chemical sprays	1				1
Total	176	204	167	175	722

Cell entries are counts of the number of mentions. Blank cells imply a 0 count.

Table 17. Respondents' reasons for overall perceived quality ratings

	Arapaho Bend	Riverbend Ponds	Shield St River Access	Salyer	Total
Very nice natural resource	33	25	22	33	113
Excellent experience	25	36	22	28	111
Well maintained	25	28	33	25	111
Love this natural resource	12	26	18	21	77
Beautiful	17	17	10	16	60
Easy access	5	7	17	8	37
Enjoy watching wildlife here	9	7	3	2	21
Close to home	5	8	2	4	19
Great trails	3	7	3	3	16
All good	2	2	3	7	14
Not crowded	6	2	4	2	14
Some trash	1	3	4	4	12
Enjoy hiking here	4	5	2		11
Need more trash cans	1	3	1	3	8
Need trail maintenance	1	2	2	3	8
Enjoy walking the dog here	3	1	2	1	7
Need more restrooms	5		1	1	7
Visitors need to pick up after their dogs	1	4		1	6
Great facilities	3	2			5
Keep it natural	1	1	1	2	5
Transient population problem			1	4	5
Need more parking	2			1	3
Need off leash dog park		2		1	3
Enjoy running here	1		1		2
Need dog bags on trail		2			2
Need more ranger patrols	1			1	2
Too much horse waste		1		1	2
Enjoy biking here				1	1
Enjoy running here	1				1
Need more lights on trails	1				1
Need more picnic areas			1		1
No dog park				1	1
Parking area needs maintenance	1				1
Poor water management		1			1
Some safety concerns			1		1
Some trail erosion			1		1
Total	169	192	155	174	690

Cell entries are counts of the number of mentions. Blank cells imply a 0 count.

Respondents were asked to evaluate the safety of their Poudre River experience (Table 18). Most individuals at Arapaho Bend (51%), Riverbend Ponds (59%), and Shields Street River Access (54%) said they believed their experiences are “always safe;” 44% of visitors at Salyer gave this rating. When the “usually safe” rating is combined the “always safe” rating, percentages increased to 93% plus.

Table 18. Perceived river safety

	City of Fort Collins Natural Area			
	Arapaho Bend %	Riverbend Ponds %	Shields Street River Access %	Salyer %
Not very safe	1	0	0	0
Somewhat safe	4	3	4	7
Usually safe	44	38	42	49
Always safe	51	59	54	44

$\chi^2 = 19.20, p = .024, V = .076.$

When asked to explain why they gave these ratings in an open-ended question, problems with transient individuals was the most frequently mentioned issue ($n = 88$), followed by the need for more bike patrols ($n = 32$) (Table 19).

Table 19. Open-ended comments regarding river safety

	Arapaho Bend	Riverbend Ponds	Shield St River Access	Salyer	Total
Transients can be a problem	17	1	25	36	88
Need more bike patrols	4	9	7	12	32
No problems – Feel safe	6	7	1	2	16
Need more lights along the trail	4	2	5	4	15
Need emergency phones		1	3	3	7
Need better enforcement of leash laws	3	2			5
Only walk during day	1	1	1		3
Need parking lot surveillance	1		1	1	3
Need more signage			1	2	3
Feel unsafe	1	1	1		3
Worry about car theft		1	1		2
Need marked lines at dangerous tunnels and intersections			1		1
Total	37	25	47	60	178

Cell entries are counts of the number of mentions. Blank cells imply a 0 count.

Conclusions

The City of Fort Collins surveyed visitors at four natural areas that border the Poudre River: Arapaho Bend, Riverbend Ponds, Shields Street River Access, and Salyer. This report compared the visitors to the natural areas in terms of their (1) demographics, (2) place of residence, (3) visitation patterns, (4) primary activities, (5) visitor satisfaction, and (6) perceived river safety.

Results indicated that slightly more females than males completed the survey. Visitors at Salyer were older than those visiting Riverbend Ponds. Four fifths were not Hispanic or Latino, and nearly 90% were white. Over two-thirds of all visitors held a bachelor's degree or higher and between 31% (Shields Street River Access) and 43% (Arapaho) had a household annual income over \$100,000. About half of these comparisons were statistically significant, but all the effect sizes were minimal or less.

Specific to residence, over 85% of all visitors were residents of Larimer County. On average, Salyer visitors had lived in the county slightly longer than visitors to the other natural areas. Approximately 10% had lived in Larimer County for one year or less; about 15% had lived in the county for more than 31 years. Overall, four-fifths of the visitors lived in Fort Collins.

Most respondents were alone on the day they were interviewed. Among those in a group, the average number of adults in the group was less than two. Over three-quarters of visitors at all areas did not have any children in the group. Respondents at Salyer and Riverbend Ponds visited more frequently than those at Shields Street River Access and Arapaho Bend. A few respondents visited every day of the year and some reported 100+ annual visits.

Across all four locations, dog walking and hiking were the two most popular primary activities. Over 10% listed mountain biking and trail running as their primary activity. The least commonly reported primary activities were picnicking and kayaking.

Respondents rated the quality of five facilities (i.e., restrooms, parking areas, picnic areas, trash receptacles, kiosk information, trails). Among those who used the facilities at the natural areas, over half of all visitors rated all facilities as good or very good. Across all five facilities, Shields Street River Access had the highest average rating, followed by Riverbend Ponds, Arapaho Bend and Salyer. Most individuals rated their overall experience as excellent. When the good and excellent response categories were combined, the percentages exceeded 95%.

Most individuals at Arapaho Bend, Riverbend Ponds, and Shields Street River Access believed their river experiences were "always safe." When the always safe rating was combined with "usually safe" rating, the percentages exceeded 93%. When asked to explain their ratings, problems with transient individuals was the most frequently mentioned issue, followed by the need for more bike patrols.

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Appendix A – Additional comments

	Arapaho Bend	Riverbend Ponds	Shield Street River Access	Salyer	Total
Very nice natural resource	33	25	22	33	113
Excellent experience	25	36	22	28	111
Well maintained	25	28	33	25	111
Love this natural resource	12	26	18	21	77
Beautiful	17	17	10	16	60
Easy access	5	7	17	8	37
Enjoy watching wildlife here	9	7	3	2	21
Close to home	5	8	2	4	19
Great trails	3	7	3	3	16
All good	2	2	3	7	14
Not crowded	6	2	4	2	14
Some trash	1	3	4	4	12
Enjoy hiking here	4	5	2		11
Need more trash cans	1	3	1	3	8
Need trail maintenance	1	2	2	3	8
Enjoy walking the dog here	3	1	2	1	7
Need more restrooms	5		1	1	7
Visitors need to pick up after their dogs	1	4		1	6
Great facilities	3	2			5
Keep it natural	1	1	1	2	5
Transient population problem			1	4	5
Need more parking	2			1	3
Need off leash dog park		2		1	3
Enjoy running here	1		1		2
Need dog bags on trail		2			2
Need more ranger patrols	1			1	2
Too much horse waste		1		1	2
Enjoy biking here				1	1
Enjoy running here	1				1
Need more lights on trails	1				1
Need more picnic areas			1		1
No dog park				1	1
Parking area needs maintenance	1				1
Poor water management		1			1
Some safety concerns			1		1
Some trail erosion			1		1
Total	169	192	155	174	690

Cell entries are counts of the number of mentions. Blank cells imply a 0 count.

Appendix B – Visitor survey



This survey will help **City of Fort Collins Natural Areas** staff better understand visitors' views and improve service delivery. Your participation is completely voluntary, and your answers will remain anonymous. **Thank you for your help- your input is greatly appreciated!**

TODAY'S VISIT

- About how many visits have you made to this natural area in the past 12 months?
(If this is your first visit or you come here less than once per year, write 0) _____
- What was your primary activity **TODAY** during your visit? (Check only one)

<input type="checkbox"/> Hiking	<input type="checkbox"/> Dog walking	<input type="checkbox"/> Photography/Art	<input type="checkbox"/> Rafting/Tubing
<input type="checkbox"/> Biking	<input type="checkbox"/> Picnicking	<input type="checkbox"/> Fishing	<input type="checkbox"/> Swimming/Wading
<input type="checkbox"/> Trail running	<input type="checkbox"/> Wildlife Viewing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Other _____
- WHO** were you travelling with today?
(Check one, and write in the number of people in your group, if more than just you today.)
 ___ Just me! ___ Group (___ # adults, ___ # children)
- Please rate the quality of each of the facilities that you used today by circling the appropriate number for each facility.

	Did Not Use	Very Poor	Poor	Average	Good	Very Good
Restrooms	0	1	2	3	4	5
Parking Areas	0	1	2	3	4	5
Picnic Areas	0	1	2	3	4	5
Trash Receptacles	0	1	2	3	4	5
Kiosk Materials & Signs	0	1	2	3	4	5
Trails	0	1	2	3	4	5

Please explain why you rated the facilities this way: _____

- How would you rate the overall quality of this natural area? *(Circle one number)*

Poor	Neutral		Excellent
1	2	3	4

Please explain why you rated it this way: _____

- Please rate how safe you feel along the Poudre River:

<input type="checkbox"/> Not very safe	<input type="checkbox"/> Somewhat safe	<input type="checkbox"/> Usually safe	<input type="checkbox"/> Always safe
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- If you feel unsafe, what could the City do to make you feel safer along the Poudre River?

Please tell us about yourself (All responses will be kept confidential).

- Which best describes your gender?

<input type="checkbox"/> Female	<input type="checkbox"/> Transgender Female	<input type="checkbox"/> Gender non-conforming
<input type="checkbox"/> Male	<input type="checkbox"/> Transgender Male	<input type="checkbox"/> Prefer to self-identify _____
- What is your age? ____ (Years)
- What is your ethnicity?

<input type="checkbox"/> Hispanic/Latinx	<input type="checkbox"/> Non-Hispanic/Latinx	<input type="checkbox"/> Prefer to self-identify _____
--	--	--
- What is your race?

<input type="checkbox"/> American Indian/Alaska Native	<input type="checkbox"/> Asian	<input type="checkbox"/> Black/African American
<input type="checkbox"/> Native Hawaiian/Pacific Islander	<input type="checkbox"/> White	<input type="checkbox"/> Two or more races
- What is your highest level of completed education?

<input type="checkbox"/> Some High School or less	<input type="checkbox"/> Graduated from High School/GED	
<input type="checkbox"/> Associate's degree	<input type="checkbox"/> Bachelor's degree	<input type="checkbox"/> Master's/Ph.D.
- What is your annual household income?

<input type="checkbox"/> Less than \$24,999	<input type="checkbox"/> \$50,000 to \$74,999	<input type="checkbox"/> \$150,000 to \$199,999
<input type="checkbox"/> \$25,000 to \$34,999	<input type="checkbox"/> \$75,000 to \$99,999	<input type="checkbox"/> \$200,000 or more
<input type="checkbox"/> \$35,000 to \$49,999	<input type="checkbox"/> \$100,000 to \$149,999	
- What is your Zip Code for your PRIMARY residence? _____
- If you live in Larimer County, how long have you lived here? _____ (Years)

COMMENTS